



## Planning and Development Services

<b>Prepared for</b>	Council-in-Committee	<b>Report No.</b>	PDS-85-2017
<b>Agenda Date</b>	November 20, 2017	<b>File No.</b>	350309

<b>Subject</b>	
<b>INFORMATION REPORT ON SHIPPING/CARGO CONTAINERS</b>	

<b>Recommendations</b>	
<b>THAT</b>	Council receives for information purposes Report No. PDS-85-2017 regarding reuse and temporary use of shipping/cargo containers.

<b>Relation to Council's 2015-2018 Corporate Strategic Plan</b>	
Priority:	A Prosperous and Growing Community
Goal:	N/A
Initiative:	N/A

<b>List of Stakeholders</b>	
Residents of the Town of Fort Erie Fort Erie Building Department Fort Erie Fire Services	

Prepared by:	Submitted by:	Approved by:
<b>Original Signed</b>	<b>Original Signed</b>	<b>Original Signed</b>
Kira Dolch, MCIP, RPP, CNU-A Associate Director, Planning and Development Services	Richard F. Brady, MA, MCIP, RPP Director, Planning and Development Services	Tom Kuchyt, CET Chief Administrative Officer

### **Purpose of Report**

On September 25, 2017, Council directed staff to provide an information report with options on amending the Town's Zoning By-law 129-90 regarding shipping/cargo containers on all properties.

### **Background Information**

Shipping containers/cargo containers are reusable storage units made of steel which are loaded on trains, ships, transport trucks etc. for the transport of goods and raw materials. Shipping/cargo containers are shipped to their destination and normally no longer used, as the cost to ship them back to the country of origin is not financially feasible. As a result, used shipping/cargo containers are now readily available to the general public to purchase at a low cost. Generally, a used 20' or 40' shipping/cargo container costs between \$2000.00 and \$4000.00 depending on its condition. These lower costs and the perception of green construction has resulted in the emergence of shipping/cargo containers being used for a variety of purposes but most commonly as accessory structures in residential, commercial, institutional, agricultural and industrial areas.

New innovation towards reuse of these decommissioned shipping/cargo containers, has led to them being used for a wide variety of alternative uses in the Niagara Region and beyond. Some examples include:

- Single detached homes and other housing
- Restaurants, coffee shops, bars
- Theatres
- Schools
- Workshops
- Emergency shelter or other emergency uses
- Portable Toilets
- Indoor gardens or farming pods
- Garages or car parks

The innovative reuse of shipping/cargo containers is endless as they can be used for any building purpose. The conversions of shipping/cargo containers can also in certain situations be a cheaper alternative to conventional buildings.

There are however some negative aspects to the use of shipping/cargo containers for alternative uses as there are a number of health and safety concerns with shipping/cargo containers. One of the biggest hazards is explosions as these units are not properly ventilated for the types of uses that now being considered. For example in Saanich BC, a 20lb propane bottle was stored in a shipping container on a construction site when it exploded and blew one of the 250lb doors 40 metres. In Enderby, BC a firefighter was killed when a shipping container exploded unexpectedly. This is a major

concern as these containers typically are used for accessory structures which can hold gas cans, barbeques, paints etc. This is where a building permit is necessary to ensure the containers are properly ventilated and engineered to protect the public from future hazards.

The second health hazard is contaminants, as most of the containers have been used for shipping and the floors are treated with pesticides or other harmful chemicals. In addition if the container is used for ocean transport the walls may have been painted with harmful chemicals to protect the cargo during transport.

The other negative aspects of shipping/cargo containers are the negative aesthetics for a community and neighbourhood. These structures are not designed for aesthetics but rather for functionality to ship product over long distances. As such they are difficult to visually integrate into a residential area and in some cases, the commercial areas.

As can be seen above, there are pros and cons to the reuse of shipping/cargo containers. In order to permit these types of uses within the Town of Fort Erie the negative aspects of using storage containers needs to be mitigated.

## Analysis

### **CURRENT ZONING BY-LAW 129-90 SITUATION**

The Town's Zoning By-law 129-90 regulates the use of land within the Town. The Town's Zoning By-law sets out regulations as to what is permitted and not permitted, where structures can be located, the height of structures, how much of the structure can cover the land etc.

The Town's Zoning By-law 129-90 currently prohibits cargo containers on any land except temporarily in the Industrial IN Zone or Prestige Industrial PI Zone. In these zones, a maximum of six cargo containers are permitted for no longer than two years.

### **THE ONTARIO BUILDING CODE**

The Ontario Building Code (OBC) is a regulation under the Building Code Act and it focusses on ensuring public safety in newly constructed buildings, energy conservation, barrier free accessibility, and sets out requirements for new buildings. In order for building permits to be issued, a building or structure must conform to the minimum requirements in the OBC.

Building a home using shipping containers requires a building permit. These uses are also subject to all the normal charges such as development charges etc. The same applies for the reuse of storage containers for public storage. Also the use of a shipping/cargo container for any other use such as an accessory use, a workshop, a farming pod etc. meets the definition of building under the OBC and therefore would require a building permit. Building is defined in the Building Code Act as:

- A Structure occupying an area greater than 10 square metres (108 sq.ft.)
- A Structure Occupying an area 10 square metres (108 sq.ft.) or less that contains plumbing, including the plumbing appurtenant thereto;
- Plumbing not located in a structure,
- A sewage system; or
- Structures designated in the Building Code.

### **OTHER MUNICIPALITIES**

Before examining how shipping/cargo containers should be regulated, it is helpful to determine how shipping/cargo containers are regulated in other municipalities.

#### Pelham

Currently, the Town of Pelham permits converted storage/shipping containers provided they meet the required setbacks. However the new draft zoning by-law which is not yet approved for the Town defines and permits shipping containers in all zones except for on a lot zoned for residential use. This restriction does not restrict the use of a sea container or unlicensed trailer to be used in a residential zone on a temporary basis for the storage of construction materials and equipment for any project undertaken by or on behalf of a public authority or for any construction project for which the Municipality has issued a building permit, provided the container or trailer is removed upon 90 completion of the project and/or prior to final inspection.

#### Lincoln

The Town of Lincoln only defines what a shipping container is but does not restrict its use. In this case, should it be converted to another use such as an accessory residential use it would be permitted provided it meets the setbacks, coverage and other requirements as detailed in the specific zone.

#### City of St. Catharines

The City of St. Catharines permits the reuse of a shipping container to another use ie. accessory use, single detached dwelling etc. provided a building permit is obtained and it conforms to the City's Zoning By-law regulations.

#### West Lincoln

The Town of West Lincoln defines a shipping container in their Zoning By-law and sets restrictions as to their use as accessory buildings. For example:

- In the Service Commercial Zone outside of settlement areas, on a lot having a minimum lot area of 2 hectares, a maximum of 2 pre-fabricated shipping/cargo containers are permitted as accessory structures to be located in the rear yard or interior side yard only;

- In the Employment Zones, prefabricated shipping containers are permitted in the rear yard or interior side yard only; and
- In Agricultural Zones, a pre-fabricated shipping container is permitted as an accessory structure to a maximum of 1 pre-fabricated shipping container per 4 hectares of lot area and not exceeding a total of 5 pre-fabricated shipping/cargo containers on a lot.

### Niagara on the Lake

The Town of Niagara on the Lake does not define containers but does recognize container uses in a trucking operation. On September 18, 2017 a resolution was passed by Niagara-on-the-Lake Council, for staff to investigate the possibility of eliminating the use of shipping/cargo containers within residential zones.

### Port Colborne

The City of Port Colborne reviewed the issue of shipping/cargo containers in 2016 and ultimately permitted shipping/cargo containers in industrial zones, site specific zones that permit industrial type uses and City owned lands zoned public and park located on the City's Island.

### Brantford

The City of Brantford dealt with the issues of shipping/cargo containers in 2016 by defining storage containers and prohibiting their use in residential areas.

The City of Brantford defined shipping containers in two ways: 1) used for transport of goods and materials and 2) a body of a transport, prefabricated portable metal storage unit which is not on wheels etc. The second part of the definition allows storage containers as accessory structures. These are permitted in all zones but residential.

Brantford's Zoning By-law prohibits the permanent placement of shipping/cargo containers as accessory structures for any residential use. They did permit the temporary placement subject to the following regulations:

- Maximum duration 30 days per calendar year.
- Maximum of 1 temporary shipping container per lot.
- Temporary shipping container no closer than 1m to any lot line.
- Maximum size of the shipping container shall be 2.5 m in height, 2.5 m in width and 6 m in length.

### Milton

The Town of Milton dealt with the issues of shipping/cargo containers in 2008 and modified their by law to permit shipping/cargo containers in a M2 General Industrial Zone subject to specific regulations such as:

- Shipping containers shall only be permitted as an accessory use to a permitted non-residential use on a lot where a principal building exists;
- Unless stated elsewhere in this By-law, shipping containers are only permitted for accessory storage purposes, based on lot area at a rate of one (1) shipping container per 0.4ha or part thereof to a maximum of four (4). In no case is a shipping container permitted on a lot having an area of less than 0.4ha;
- In no case shall a shipping container exceed a height of 3m and a total length of 16.76m;
- A shipping container shall only be located in the rear yard and shall be located no closer than 30m from any street line;
- A shipping container shall be screened from view from the street and abutting properties zoned Residential, Institutional, or Natural Heritage;
- Unless elsewhere stated in this By-law a shipping container shall not be located in a required parking area and in no case shall encroach into a required landscape buffer;
- A shipping container shall not be placed for the purpose of display or advertising,
- Notwithstanding any other provision to the contrary, a shipping container shall not be used for the purpose of a commercial storage facility.

Milton also dealt with the temporary shipping containers by permitting a shipping container in the driveway of a residential property for the purpose of the temporary loading or unloading of household items during the process of moving for a period not exceeding five (5) days provided it does not exceed a maximum height of 3.0 m and a maximum length of 6.1m. The By-law goes further to also state that in no case is a shipping container to encroach onto a public sidewalk; be located closer than 0.3 m from the back of curb in situations where no sidewalk exists; or, creates a site line obstruction.

In addition, a shipping container is permitted on a construction site in any zone being developed on a stand-alone basis or under a plan of subdivision for the purposes of temporary storage of equipment and materials incidental to construction only, and subject to the following restrictions: a) shall not exceed a height of 3.0m and a length of 16.76m; b) not to exceed six (6) in number; c) shall be removed from the site within 60 days of completing the work;

### Sarnia

In Sarnia, the permanent placement of shipping containers as accessory uses and buildings shall be permitted in the Industrial zones, resource extraction zone, major transportation zone and the waterfront 1 zone subject to special provisions:

- Shipping containers shall be used for storage purposes only and shall be accessory to the main permitted use on the property.
- Shipping containers shall be located in interior side yards and rear yards only.
- In any rear yard, a Shipping Container shall have a minimum building setback of 0.6m.
- In any interior side yard, no Shipping Container shall be erected closer to the side lot line than the side yard setback required for the main building to which it is accessory.
- The total lot coverage of shipping containers in Industrial Zones shall not exceed 10% of the lot area.
- The total maximum combined lot coverage for all accessory buildings, structures and shipping/cargo containers on a lot in the resource extraction, major transportation and waterfront zones shall not exceed 10% of the lot area.
- Shipping containers shall not be stacked.
- Shipping containers shall not be located in any yard abutting a Residential Zone.

In addition, temporary shipping containers may be used in any zone for construction use ie. tool shed and for moving purposes, provided that:

- No shipping container shall be permitted to locate in a daylight corner, a required parking space, or within 1m of any lot line.
- The temporary storage of household items or items normal and incidental to a main permitted use may be stored in a shipping container for a maximum of 60 days per calendar year.

### Hamilton

The City of Hamilton permits shipping/cargo containers in any zone but the use of such is expected to adhere to the normal requirements as for a conventional constructed building such as requirement of a building permit, conformity to the Zoning By-law and where required site plan approval, site servicing agreements, development charges, parkland dedication, and fire safety provisions.

### City of London

The City of London permits shipping containers to be used as a temporary use provided:

All Residential Zones:

- A shipping container for moving or relocating is permitted for a maximum of 2 months within a calendar year in a residential area;
- A shipping container for the purposes of building renovation is permitted for a maximum of 4 months within a calendar year in a residential area;
- A maximum of two (2) (in total) shipping containers not exceeding 6 metres (20 feet) in length x 2.4 metres (8 feet) in width x 2.6 metres (8.5 feet) in height shall be permitted per property

All Non Residential Zones:

- In all non-Residential Zones the storage container is permitted for a maximum of 4 months within any calendar year.
- Other Regulations such as yard setbacks are required as per the applicable zone.
- Gross Floor Area relating to the temporary use does not require additional on-site parking.
- A temporary reduction in the required parking may be permitted in association with the establishment of the temporary use.
- No more than two (2) shipping containers or trailers not exceeding 6 metres (20 feet) in length x 2.4 metres (8 feet) in width x 2.6 metres (8.5 feet) in height; or one (1) shipping container or trailer not exceeding 12.1 metres (40 feet) in length x 2.4 metres (8 feet) in width x 2.9 metres (9.5 feet) in height shall be permitted per property.

Building Additions:

- Where a shipping container or trailer (both not exceeding 12.1 metres (40 feet) in length x 2.4 metres (8 feet) in width x 2.9 metres (9.5 feet) in height) is to be used as the sole base of operations for a non-residential business, its installation shall be subject to all regulations of the underlying zone and to Site Plan Control.
- Where a shipping container or trailer (not exceeding 12.1 metres (40 feet) in length x 2.4 metres (8 feet) in width x 2.9 metres (9.5 feet) in height) is to be used as additional floor space (or permanent storage) to an existing establishment in any multi-family (3 or more units) or non-residential zone, the following regulations shall apply:
  - 1) the location, floor area, setbacks and all other regulations of the underlying zone shall apply;
  - 2) it shall only be permitted in the rear yard;
  - 3) the installation is subject to Site Plan Control(except for Agricultural uses which are not subject to Site Plan Control); and,
  - 4) no more than two (2) shipping/cargo containers or trailers not exceeding 6 metres (20 feet) in length x 2.4 metres (8 feet) in width x 2.6 metres (8.5 feet) in height; or one (1) shipping container or trailer not exceeding 12.1 metres (40 feet) in length x 2.4 metres (8 feet) in width x 2.9 metres (9.5 feet) in height shall be permitted per property.

Shipping/cargo containers (as permanent structures) shall be prohibited on any property designated under Part IV or Part V of the Ontario Heritage Act.



### **OPTIONS TO CHANGE THE TOWN'S ZONING BY-LAW 129-90**

Shipping/Cargo containers will need to be clearly defined to establish when a Shipping/Cargo container is used for its intended use and when it is used for another use.

Shipping/cargo containers that have ceased to be shipping/cargo containers can be used for a wide variety of uses but should in some cases be subject to site plan control. By requiring site plan control it provides the municipality with the ability to control the negative aspects associated with cargo containers such as screening and aesthetics. Criteria for site plan control are included in the site plan control guidelines but separate criteria may need to be established for the reuse of shipping/cargo containers.

All adaptive reuse of shipping/cargo containers will be subject to the regulations in the applicable zone. i.e. in residentially zoned areas, accessory structures must be setback 1m from the rear and side lot line and cannot exceed a height of 4.5 m or a lot coverage of 10%.

The adaptive reuse of shipping/cargo containers will also be subject to the building permit requirements. This will ensure these units are properly ventilated and engineered for their proposed use to protect the public from harm.

Stacking of shipping/cargo containers for an accessory use will not be permitted in any zone except in Industrial zones.

To assist in minimising the impact of shipping/cargo containers within the Town of Fort Erie the following is also suggested:

- The use of materials from shipping containers for the construction of a single detached dwelling or other adaptive reuse except for an accessory structure will be regulated through site plan control and the building permit process.
- Council requested that staff review shipping containers in all zones however staff have concerns allowing industrial shipping/containers in residential areas as it would detract from the beautification efforts the Town prides itself on. In addition, staff are concerned with the safety hazards associated with shipping containers in a residentially populated area.

Should Council wish to proceed with allowing a shipping/cargo container as an accessory use in the residential zones, staff would suggest the following: Only one converted shipping/cargo container will be permitted as an accessory use or for another purpose other than its intended purpose on a residentially zoned property subject to site plan control. This would also require an amendment to the Town's site plan control by-law.

- Only one converted shipping/cargo container will be permitted as an accessory use or for another purpose other than its intended purpose on a property zoned Core Mixed Use (CMU), Central Business District (C2A) or Local Commercial (C1) zoned property subject to site plan control.
- Only one shipping/cargo container will be permitted as an accessory use or for another purpose other than its intended purpose on an institutional property subject to site plan control.
- In all other commercial zones, a shipping container as an accessory use or for another purpose other than its intended purpose is permitted subject to a maximum of 2 shipping/cargo containers per property subject to site plan control.
- In Agricultural Zones, a shipping container is permitted as an accessory structure or for another purpose other than its intended purpose to a maximum of 1 shipping container per 4 hectares of lot area and not exceeding a total of 4 pre-fabricated shipping/cargo containers on a lot.
- In Industrial Zones shipping/cargo containers as an accessory structure or for another purpose other than its intended purpose will be permitted provided they are located in interior side yard or rear yard and screened from view.

In all cases noted above, a building permit will be necessary and development charges may be applicable dependant on the use of the structure.

### **Temporary Uses:**

To ensure home owners can use the shipping/cargo containers for moving or house renovations the following is suggested:

- a shipping/cargo container is permitted in the driveway of a residential property for the purpose of the temporary loading or unloading of household items during the process of moving and for a period not exceeding thirty (30) days provided it is setback 1 m from all property lines and does not exceed a maximum height of 3.0 m and a maximum length of 6.1m.
- a shipping/cargo container is permitted in the driveway of a residential property for the purpose of the temporary storage of household items during renovation of an existing dwelling for a period not exceeding sixty (60) days provided it is setback 1 m from all property lines and does not exceed a maximum height of 3.0 m and a maximum length of 6.1m.

To ensure institutional areas have the ability to temporarily store items for charitable donation for shipping the following is suggested:

- a shipping container is permitted in the rear or interior side yard for the purpose of the temporary loading or unloading of items for charitable purposes for a

period not exceeding 12 months provided it is setback a minimum of 1 m from all side and rear property lines and screened from any view.

To ensure industrial areas have the ability to temporarily store items for shipping the following changes are suggested:

In any area zoned Industrial, shipping/cargo containers for their intended shipping use will be permitted for a period of not more than 12 months subject to the regulations of those zones. Stacking of shipping/cargo containers will be limited to a maximum of 3 stacked high.

A building permit will not be required for temporary uses as the shipping/cargo containers continue to be used for their intended purpose.

### **POSSIBLE RECOMMENDATIONS**

Should Council wish to proceed with an amendment to the Zoning By-law to deal with the above noted changes then Council should pass one of the following recommendations:

**“That Council authorize a Town initiated amendment to the Town’s Comprehensive Zoning By-law 129-90 to address the reuse and temporary uses of shipping containers excluding permanent shipping/cargo containers in residentially zoned areas ” or**

**“That Council authorize a Town initiated amendment to the Town’s Comprehensive Zoning By-law 129-90 to address the reuse and temporary uses of shipping containers including permanent shipping/cargo containers in residentially zoned areas”**

### **OTHER OPTIONS**

Council could choose to continue the status quo to prohibit the use of shipping/cargo containers except on a temporary basis in industrial areas or Council could choose to permit cargo containers in all zones without limits or restrictions. The status quo option, limits temporary shipping/cargo containers to only the industrial area and would not permit them temporarily in the residential areas for moving or renovating or in other areas permanently within the Town. The no restriction option would allow shipping/cargo containers in all zones without controls which could impact aesthetics and could lead to safety risks.

### **Financial/Staffing Implications**

Processing of any amendment to the Town’s Zoning By-law 129-90 would be done by internal planning staff.

### **Policies Affecting Proposal**

Land use policies for the subject lands are contained in the Official Plan as well as the applicable Regional and Provincial Regulations.

The Site Plan control By-law and guidelines will need to be amended to address this adaptive reuse should an amendment be authorized.

### **Comments from Relevant Departments/Community and Corporate Partners**

#### **Agency Comments**

A request for comments will be sent out to agencies and departments should Council wish to proceed with an amendment to the Town's Zoning By-law for shipping/cargo containers.

### **Communicating Results**

Should Council approve to move forward with an amendment to the Town's Zoning By-law, staff will seek public input through the Zoning By-law amendment process.

Notification of a Town initiated Zoning By-law amendment would be provided in accordance with requirements of the Planning Act by placing an advertisement in the Fort Erie Times Newspaper as well as in accordance with Council's May 6, 2013 direction for providing notice of Town initiated amendments.

### **Alternatives**

None.

### **Conclusion**

The availability of low cost shipping/cargo containers to the general public has led to more and more shipping/cargo containers popping up all over the Town of Fort Erie. In order to address the issues associated with the conversion of these units, staff have prepared this report at the direction of Council to outline the issues and provide zoning options for discussion and consideration for use in a future Town initiated Zoning By-law amendment.

### **Attachments**

None