



Parks and Gardens Maintenance Policy and Procedures

July, 2010



Park and Gardens Policy and Procedures

Scope of the Policy

The goal of the Policy is to ensure the provision of sustainable parks and gardens while utilizing the current available financial and staff resources as allocated with the annual approved Capital and Operating Budget.

To achieve the highest possible level of service with the available resources The Municipality of Lambton Shores will continue to adopt a proactive and integrated approach to its parks and gardens maintenance.

Objectives

The specific objectives of the policy are to:

- Have a range of safe, visually pleasing, high quality and well maintained passive recreation areas throughout Lambton Shores.
- Have maintenance strategies and activities in place.
- Ensure sustainability of available resources to provide effective management and administration of Parks and Gardens programs.
- Limit the consumption of natural resources and encourage and promote environmentally sustainable practices.
- Ensure that Lambton Shores Parks and Gardens are maintained as to continue to be enjoyed by future generations.

There are several aspects of parks and gardens management which require be considered to ensure that Lambton Shores' parks and gardens are maintained as efficiently and effectively as possible. These include:

- Turf Maintenance
- Tree Management
- Garden Maintenance
- Irrigation and water conservation
- Weed, pest, and disease control



Turf Maintenance

The information in this policy will help Community Services staff become effective and more efficient professionals. It will introduce and give a better understanding and to present standards regarding procedures for staff to follow.

Turf Maintenance

The basic practices required to maintain quality turf are irrigation, mowing, fertilization, aeration, over-seeding, top dressing, and pest management. Each maintenance practice is an important balance.

Irrigation – To maintain a healthy, actively growing turf it is essential to irrigate during the driest months of the year. Various factors such as soil conditions, type of turf, usage, will dictate how much to water.

To check for early stages of water stress, foot printing, leaving foot prints in the turf; and blue-gray leaf colour are sure signs of grass wilting and water stress. Caught in these stages, the grass will usually recover in a short amount of time. Ideally staff will apply half the amount of water needed each week every 3 to 4 days, where current irrigation infrastructure is available.

Mowing – Mowing affects turf grass: quality, density, texture, colour and uniformity. Improper mowing techniques can effect grass rooting, stem and shoot growth which ultimately leads to poor turf. This height cutting is within 2.50-3.0 inches variance, being the norm for Community Services.

Similarly for sport play, users desire a shorter cut; however this is not economically feasible due to resources. Cutting height is raised in the summer to conserve water, lowered in the spring to aid in the thatch control and speed spring green-up, and increase shoot density.

Community Services will mow the turf frequently enough so to never remove more than 1/3 of the grass blade at one mowing. Grass clipping which do not interfere with the intended use of the area or disrupt its appearance will remain within the field. If a machine does have a mulch attachment it should be installed and used at all times.

Fertilization – Turf grass requires a minimum of one application of fertilizer per year. The Community Services Department applies fertilizer in late September through October. These applications provide winter stress tolerance, increase the number of new plants in the spring, encourage deeper and stronger roots, and normally speed up spring green-up.

Should staff have concerns regarding the health of the turf a prequalified professional landscaper will be contacted for assistance.

Aeration – The Community Services Department will aerate at a penetration is 3 to 6 inches deep and 20 to 40 holes per square foot. Aerifier with hydraulic-driven reciprocating arms are the most effective, however aerifiers that are weighted and roll behind tractors will work but multiple passes may be needed to achieve desired results.

Aeration will occur in the fall should budget permit.

Over seeding- In areas with constant traffic or wear, it is important to over-seed to maintain turf density. The most favorable time to over-seed is September, early October. However, for the areas of turf that receive heavy use, over-seeding can and should be done any time of the year as long as there is adequate irrigation and temperatures remain mild to provide for germination and establishment.

Top Dressing – The practice of spreading a thin layer of soil and/or sand over a turf area then dragged or brushed into the turf is called top dressing. Top dressing is helpful in smoothing turf areas and can help improve establishment when used after seeding-over seeding. Top dressing with sand following aeration may help change the soil profile; however this usually takes many years.



Tree Management

Planning and management of the urban forest is essential to ensure a healthy, aesthetic, safe, diversified and all aged tree cover. The long term goal is for the creation, protection, and maintenance of a relatively low cost, healthy, urban forest for the benefit of the community that is managed according to the principles of sustainable development.

The Municipality of Lambton Shores maintains two tree farms within the Municipality. These trees are all native to the area and were developed through the assistance of the Ausable Bayfield Conservation Authority and the St. Clair Regional Conservation Authority. The trees which are grown within these two nurseries will be used within Capital projects and as a replacement for trees which were required to be removed. The CA's assist the Municipality in monitoring the tree farms for disease and report to the Municipality any additional maintenance required.

The Municipality of Lambton Shores staffs monitors and maintain the trees on public property and rights-of-ways (ROW). The Community Services Department will contact an prequalified arborist or outside contractor for the removal of dead, damaged or diseased large caliper trees.

Appendix A depicts the specified recommended way to plant trees within the Municipal ROW and owned property.

Tree Planting

Location: To assist staff and the public on the planting of trees within the Rights-of-Ways and parks the following information has been developed. Street trees will be located within the ROW under the following direction:

- Trees shall be planted on street boulevards where applicable and approval has been given by the Municipality of Lambton Shores.
- Species selection will be with the assistance of Hydro One and the regulating Conservation Authority
- Trees shall be planted a minimum of 1.5m from driveway edge
- Trees shall be planted a minimum distance of 15m from a stop sign
- Trees shall be planted a minimum distance of 2.75 metres from a street light
- No tree is permitted where the area between the curb and sidewalk is less than 2.1m
- No tree planting shall be made within one meter of any building

- Trees are not to be planted in line with any above utility lines

Species Selection: Urban trees are selected using the following criteria:

- hardiness
- resistance to disease
- multi-season interest
- size at maturity

Due to threat of invasion of emerald ash borer, the planting of ash trees is suspended. Governing Conservation Authority will also give advice on species selection when required.

Planting Location: Street trees are planted on street ROW using the following guide:

- minimum distance of 2.1 m between curb and sidewalk;
- minimum of 1.5 m from driveway edge;
- minimum of 2.5 m from a street light;
- minimum of 1 m from buildings;
- minimum of 1 m x 1 m cut out area for all trees planted in a sidewalk; and
- trees are not planted in line with any above utility lines

The governing utility company will also be contacted prior to planting to discuss appropriate locations.

Planting Procedures

1. Check for underground services of hydro, water, phone and cable by obtaining locates.
2. Prepare site by digging holes with backhoe.
3. Dig hole 20 cm wider and the same depth as the root ball.
4. Untie burlap and rope from tree trunk and root ball and place in hole. If tree is container grown, remove from pot.
5. Flush cut broken or frayed root ends with secateurs.
6. Holding trunk vertical, plant in centre of hole at same depth as original growing depth.
7. Backfill with native soil. Adjust if necessary and pack the root ball firmly.
8. Build water well to hold water in well.
9. Add a mulch ring of woodchips at a depth of 10 cm at the base of the tree (not touching tree) and a depth of 15 cm farther out in a ring minimum 1 m in radius.
10. Stake tree for one year, using plastic hose to protect tree from being cut by support wires.

Maintenance of Newly-Planted Trees

- Water newly-planted trees regularly during the first year
- Remove stakes from trees after one year. Monitor windy locations for extension of time that stakes are required.
- Top up mulch rings as required.
- Ensure that no signs, notices, etc are nailed to any tree.
- Avoid use of weed trimmers against the trunk of any tree.

Tree Pruning

Every effort is made to preserve existing trees within the Municipality of Lambton Shores. Assessments of special concerns related to trees in the Municipality are made by qualified personnel and a report is brought back to the Community Services Department for action.

All tree pruning on public lands within the Municipality of Lambton Shores is completed by qualified Municipal employees or authorized prequalified personnel. Tree pruning requiring the use of a chainsaw and is completed by Municipal employees having specific chainsaw qualifications.

Wood waste is brought to the compost site for mulching. The mulch is available at this point free of charge to all municipal residents.

Tree Removal

The policy of the municipality is to replace each tree removed from municipal property when applicable. The removal of large caliper trees is contracted to a prequalified arborist.



Garden Maintenance

The information in this guideline will assist Community Services staff in the maintenance of all municipally owned gardens in an effective, sustainable manner.

Inspection

Staff will observe shrubs for dieback and prune after spring growth resumes but before the foliage has a chance to fill out. Staff will use clean, sharp bypass pruners to remove dead wood down to the next healthy branch or shoot.

Staff will also review all trees within these gardens, if questions arise regarding the health of a tree an arborist will be contacted to review this situation and comment on measures for improvement. Based upon the size of the tree either staff or an arborist will remove dead, damaged, and diseased branches. Staff will also thin and trim all summer-blooming shrubs such as butterfly bush and roses. Staff will also rake mulch from beds planted with bulbs before foliage appears, and refresh mulch in other planting areas.

Soil Testing

Staff will also check soil pH with a home soil test kit when deemed necessary. When required, staff will request the assistance of a professional for advice on soil rendering.

Fertilize

Apply balanced fertilizer (6-6-6 or 8-8-8), fish emulsion, or other soil amendments recommended by soil-test results, or the recommendation of a professional, around trees and shrubs when new growth appears.

Mulching

Mulching holds moisture and adds fresh organic matter, which improves soil drainage, texture, and fertility. It also prevents weeds from growing, since it deprives their seeds of the light they require to germinate.

Staff will inspect the garden beds for appropriate depth of mulch through-out. This depth of mulch is suggested to be approximately 2 inches in depth within the flower beds. Smooth the mulch with a garden rake.

Coarse-textured mulches such as hardwood bark will be placed under trees and in shrub borders. Use the finer grades such as chips or shredded bark will be used within Municipal flower gardens.

Composting

Staff will collect trimmings and transport to the Municipal Compost site located at 7550 Brush Road Forest ON. The compost site is operated under a Ministry of the Environment Certificate of Approval and the Municipality of Lambton Shores Compost policy and operational plan.

Deadheading Flowers

Deadheading flowers maintain the plants health preventing the plant from trying to form seed. Once the blooms fade, trim off neatly. Prompt deadheading prevents reseeding in the garden.



Irrigation and Water Conservation

The Municipality of Lambton Shores has developed a by-law to help control outdoor water use. (By-Law 51-2002, Appendix B). Other measures in which the Municipality has currently undertaken to assist in water conservation and irrigation include:

Installation of a rain barrel at the Port Franks Hall:

Water captured from the roof is used for irrigation of the flower gardens on this property.

Northville Shop:

Installation of a landscaped entrance way. Water from the dew on the roof drips onto this area and assists in recharging the ground water.

Grand Bend Beach Parking Areas:

Remained gravel to assist in storm water management and recharging ground water.

Irrigation:

Located at our more visual parks through-out the Municipality, sprinkler systems have been installed to assist in the watering of the larger gardens. All systems are placed on a timer system and when cost conducive the system is retrofitted with a rain gauge. All systems are scheduled to operate during the early morning hours.

All gardens which have an installed irrigation systems will be placed on an automatic watering program in which watering will occur during the hours of 2:00am to 5:00am. All other flower gardens/hanging baskets will be water as required, usually 4 times per week.

The Community Services Department will also exchange all faucets and toilets with low flow options when renovations and Capital funding deem appropriate.



Weed, Pest and Disease Control

It has been documented that pesticides have a negative impact on the environment. The geographic location of Lambton Shores, and its proximity to numerous species at risk and endangered flora and fauna, it is imperative that operations and practices be as environmentally friendly as possible. It is essential to maintaining the sensitive environment.

The Community Services Department relies on a few key ingredients to control weeds, pests and diseases. These include the following:

- The Right Plant at the Right Place
- Use of Organic Fertilizers
- Physical weed control
- Homeopathic Weed Control Applications

The Right Plant in the Right Place

The first control measure for weeds and pests is the right plant for the right location. This involves actions such as picking the right plant for the right hardiness, light, moisture, pest and disease problems. As currently the Community Services Department does not have this expertise in-house it will rely on local greenhouses, volunteers and design consultants to recommend planting materials for beds on municipal projects.

Use of Organic Fertilizers

In 2008 the Municipality of Lambton Shores completed a test phase of a corn gluten meal (CGM) product which was used to control an infestation of crab grass within the Klondyke Sports field. This product was very effective.

The Community Services Department will apply CGM once a year in the fall. Fall application prevents weed root systems from establishing before winter. This application will occur between April and May.

Physical Weed and Pest Control

Physical Weed Control involves the exertion of force by mechanical means to the root system of the weed.

Good sanitation and the hand picking off of the eggs, active larvae and adults can control many insects and diseases. Community Services staff is required to wash tools before and after each use when weeding. This is to prevent cross contamination or the transportation of pests to other areas of the Municipality. Garden beds and parklands will be checked on a weekly basis.

If weeds and pests are present removal will occur as soon as practicable. If staff is unsure of the most effective control method an outside resource such as an arborist, botanist etc maybe contacted to assist.

Homeopathic Weed Control Applications

The Community Services Department continually reviews and attempts to improve pest and weed control through the application of homeopathic remedies. These applications not only are a benefit to the environment as they do not contain harmful chemicals which could affect the residents of the Municipality these initiatives have also shown a cost benefit to the Department.

These applications include:

- Hot Water
- Mixture of Soap, Salt and Vinegar solution

Hot Water

Weeds can be controlled by applications of hot water. This method cooks the plant material causing death. This method is to be used on hard surfacing such as interlocking stonework.

Salt/Vinegar/Soap Mixture

This combination is strong and the salt will sterilize the soil where you use it. Be careful. This is not recommended for concrete areas as it will corrode the concrete. This is more potent when done during hot weather, avoid watering the area for 24 hours.

Salt/Vinegar/Soap Mixture Recipe:

1. Mix 1 pound of salt with one gallon of 5% acetic acid white vinegar.
2. Stir until the salt dissolves.
3. Mix in one teaspoon of liquid soap or two ounces of molasses to act as a surfactant.
4. Spray the foliage thoroughly or inject into the crown. You may have to repeat in a few days.

Future Options For Weed Control

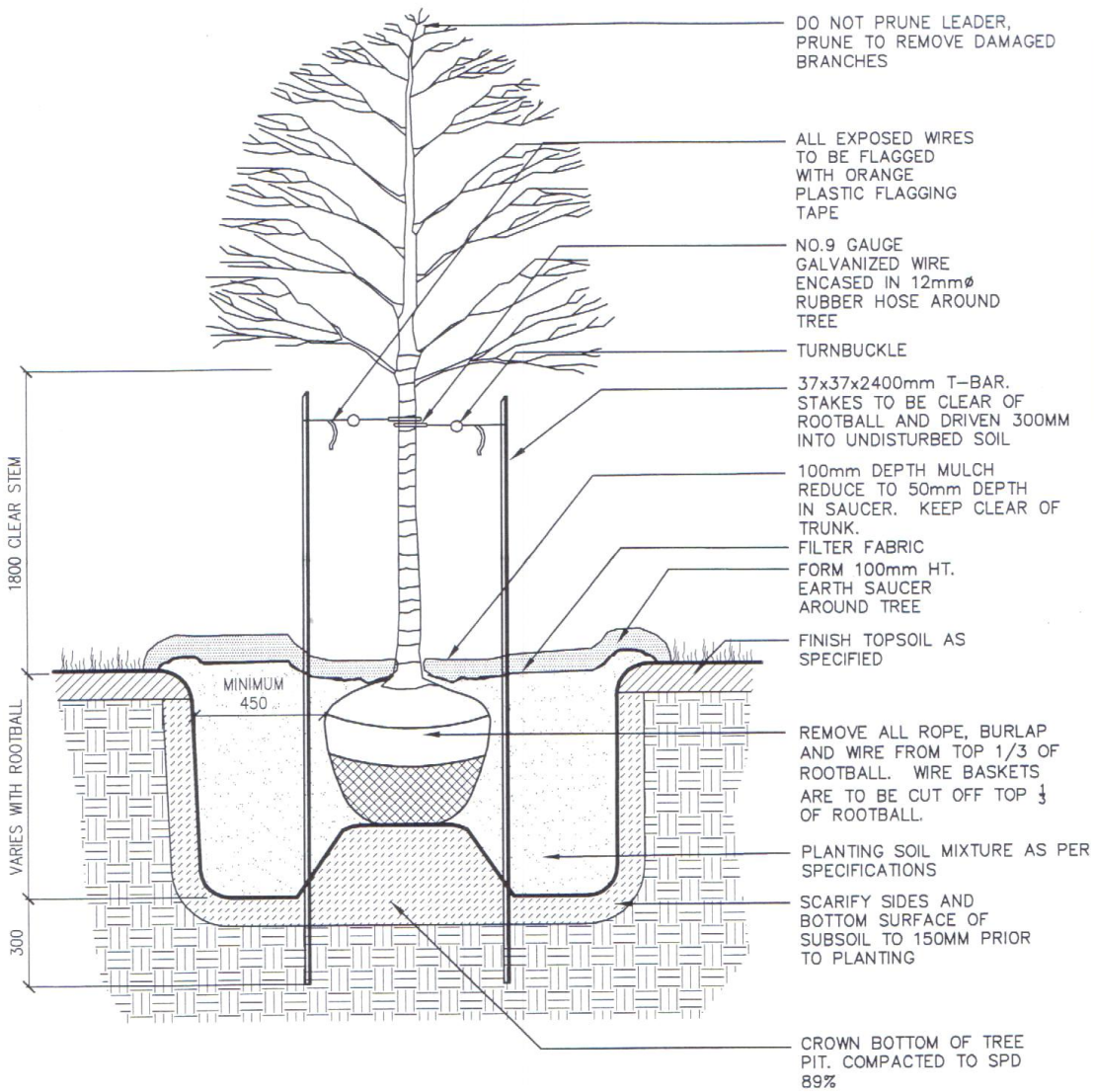
The Municipality of Lambton Shores is continually attempting to improve its Level of Service to its residents while maintaining costs and effectiveness. Over the next few years the Community Services Department will be testing these following products for effectiveness.

- **Garlic Spray**- blend garlic, onion, or chives to a paste
add water stand strain
- **Hot Pepper Spray** - Blend hot peppers add water strain



The Municipality of **Lambton Shores**

Appendix A Tree Planting Specification



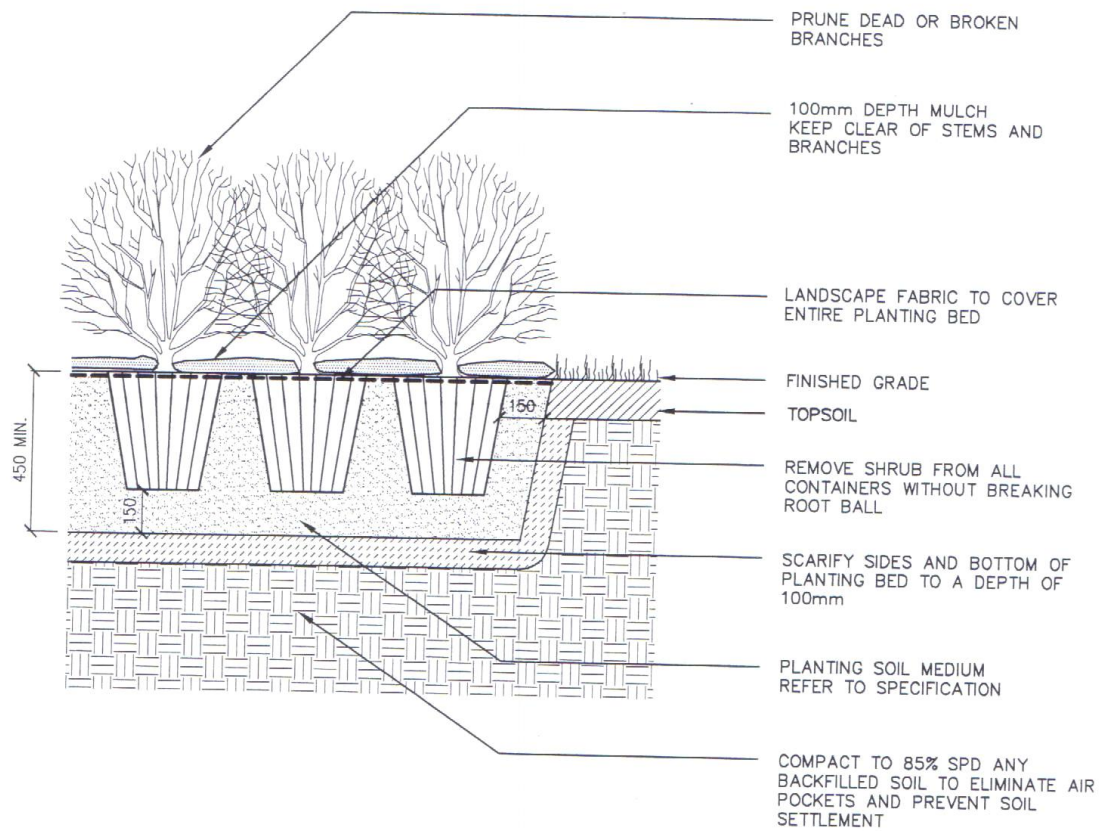
NOTES:

1. ALL DIMENSIONS SHOWN IN MILLIMETRES
2. THIS DETAIL IS TO BE USED IN CONJUNCTION WITH SPECIFICATION SECTION:
02950 - TREES, SHRUBS, GROUND COVERS
02260 - TOPSOIL AND FINISH GRADING
3. THIS DETAIL DOES NOT REPRESENT ANY PARTICULAR TREE SPECIES
4. SET TREE 50mm HIGHER THAN ADJACENT FINISHED GRADE TO ALLOW FOR SETTLEMENT
5. ALL TREES GREATER THAN 70mm CAL. TO BE WRAPPED WITH BURLAP TO 1200mm HEIGHT

1

DECIDUOUS PLANTING ON SUBGRADE

NOT TO SCALE



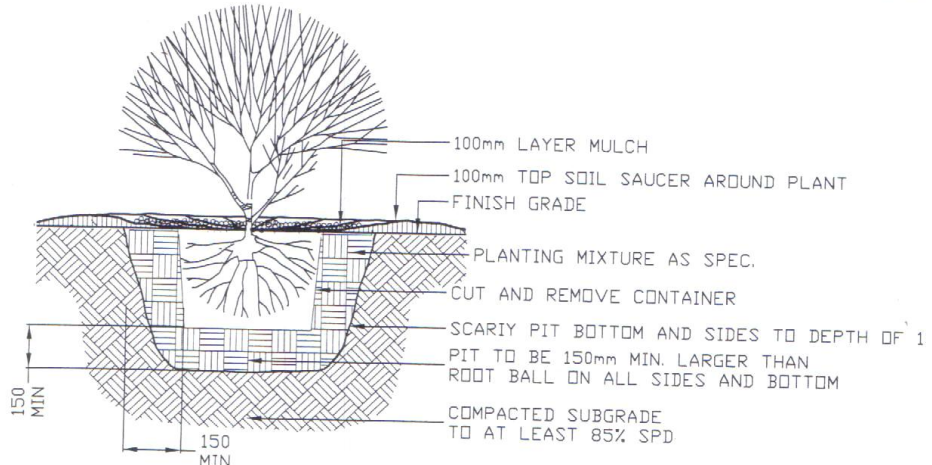
NOTES:

1. ALL DIMENSIONS SHOWN IN MILLIMETRES
2. ALL SHRUBS TO BE PLANTED IN CONTINUOUS BEDS
3. THIS DETAIL DOES NOT REPRESENT ANY PARTICULAR SHRUB SPECIES
4. THIS DETAIL IS TO BE USED IN CONJUNCTION WITH SPECIFICATION SECTION:
02950 - TREES, SHRUBS, GROUND COVERS
5. SET TOP OF ROOTBALL 50MM HIGHER THAN FINISHED GRADE TO ALLOW FOR SOIL SETTLING

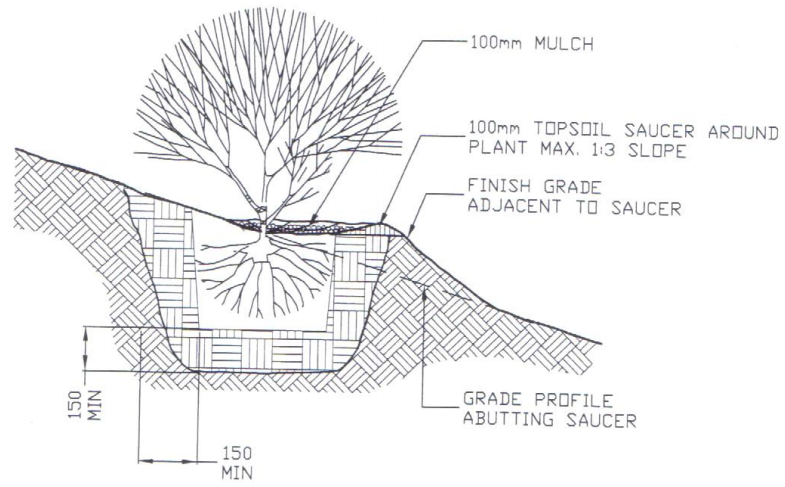
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SHRUB PLANTING ON SUBGRADE

NOT TO SCALE



SHRUB PLANTING ON LEVEL GROUND



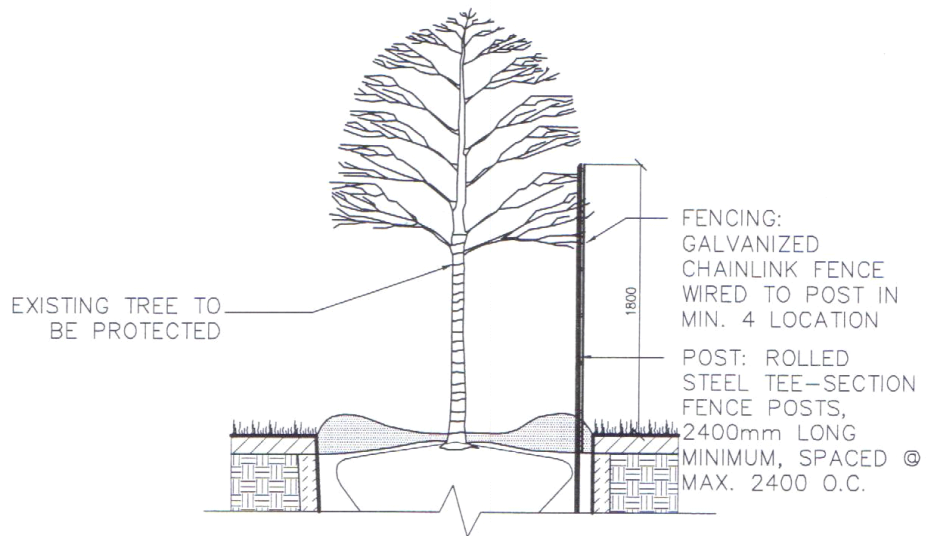
SHRUB PLANTING ON SLOPE

- NOTES:
 -WATER THOROUGHLY AFTER PLANTING
 -PRUNE ONLY INJURED, INFECTED OR DEAD BRANCHES. RETAIN NATURAL SHAPE. PAINT ALL CUTS OVER 13mmØ WITH APPROVED TREE PAINT
 -BASE OF SHRUB TO RETAIN SAME LEVEL AS FINISH GRADE
 *REFERS TO BOTH DECIDUOUS AND CONIFEROUS SHRUBS

5

SHRUB PLANTING ON GRADE OR SLOPE

NOT TO SCALE



NOTES:

1. ALL DIMENSIONS SHOWN IN MILLIMETRES
2. THIS DETAIL IS TO BE USED IN CONJUNCTION WITH SPECIFICATION SECTION:
 - 02950 – TREES, SHRUBS, GROUND COVERS
 - 02104 – TREE PROTECTION
 - 02105 – TREE TRANSPLANTING
3. THIS DETAIL DOES NOT REPRESENT ANY PARTICULAR TREE SPECIES

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TREE PROTECTION/HOARDING

NOT TO SCALE



The Municipality of **Lambton Shores**

Appendix B
By-Law 51-2002

THE CORPORATION OF THE MUNICIPALITY OF LAMBTON SHORES

BY-LAW 51 OF 2002

Being a By-law to Regulate the Provision of Water in the Municipality

WHEREAS: Section 8 of the Public Utilities Act authorizes Council to pass By-laws to regulate the distribution and use of water within the Municipality:

AND WHEREAS: It is deemed necessary and desirable to provide for regulations for such water works.

NOW THEREFORE THE MUNICIPAL Council of the Corporation of the Municipality of Lambton Shores enacts as follows:

1. DEFINITIONS:

- 1.1 "Director" means the Director of Community Services, or his designate
- 1.2 "Municipality" means the Municipality of Lambton Shores, or its successor.

2. ADMINISTRATION

2. All works necessary to the collection, production, treatment, storage, supply and distribution of water shall be under the direction and control of the Director.

3. LAWN WATERING

3. From the 15th day of June to the 31st day of August, inclusive of both dates, in each and every year, water shall not be used for lawn or garden watering, irrigation of gardens, filling of swimming pools, washing of vehicles, or any other non-necessary purposes as may be designated by the Director except as follows:
 - (a) Properties with street numbers ending in 0, 2, 4, 6, and 8 may carry out such activities on the even days of the month from 8 o'clock a.m. to 10 o'clock a.m., local time, and from 7 o'clock p.m. to 10 o'clock p.m., local time.
 - (b) Properties with street numbers ending in 1, 3, 5, 7, and 9 may carry out such activities on the odd days of the month from 8 o'clock a.m. to 10 a.m., local time, and from 7 o'clock p.m. to 10 o'clock p.m., local time.

- (c) Properties with automatic sprinkler systems on timers may, with the prior approval of the Director, carry out lawn or garden watering or garden irrigation for a period not to exceed two hours, between the hours of 3 o'clock a.m., local time, and 6 o'clock a.m., local time, subject to such conditions as the Director may impose.

4. EMERGENCIES

4.1 During any emergency period when it appears in the opinion of the Director that the demand for consumption of water will reduce the water pressure in the Municipal Water System, thereby threatening the safety and supply of water, the Director is hereby authorized to reduce any of the periods referred to in Section 3 or ban the use of water for any non-essential purpose as in his discretion appears necessary to prevent water demands from exceeding plan capacity. Notification of such a restriction will be made by any method deemed reasonable and appropriate to the Director.

4.2 (a) For the purposes of this By-law, the words "non-essential" shall mean lawn or garden watering, irrigation of gardens, filling of swimming pools, and washing of vehicles, and may, in the case of severe emergency as declared by the Director include any of the following purposes as the Director may specify from time to time:

- i) Washing or rinsing of laneways, patios or buildings;
- ii) Any other purpose that the Director deems is necessary to regulate or ban in order to prevent water demands from exceeding plant capacity.

(b) Notwithstanding Section 2 (a) above, "non-essential purposes" shall not include such uses by commercial or industrial establishments as are necessary for the purposes of carrying on their enterprise unless the Director so specifies.

(3) Any person affected by a decision made under this section may apply to the Director for special relief from such Order and the Director may refuse such relief or grant it on such terms as he deems appropriate.

5. TAMPERING

No person shall alter, tamper with, move, bi-pass or otherwise interfere with a meter or the flow of water through it.

6. PRESUMPTION

For the purposes of any prosecution under this By-law the registered owner as disclosed by the Registry Office shall be presumed to be the person responsible for any breaches of this By-law, absent proof, on the balance of probabilities, to the contrary.

7. OFFENCE

Every person who breaches a section of this By-law is guilty of an offence and subject to a penalty as provided under the "Provincial Offences Act". For the purposes of this By-law, an offence that commences on one calendar day and continues until the next day shall be considered to be two offences and so on through successive days.

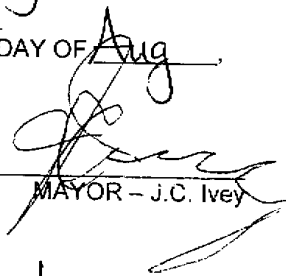
In addition to any other remedy or penalty imposed under this by-law, the court in which a conviction has been entered and, any Court of competent jurisdiction thereafter, may make an order prohibiting the continuation or repetition of the offence by the person convicted.

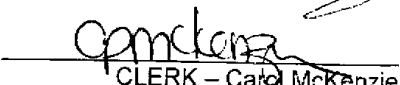
8. SHORT TITLE

The short title of this By-law is the "Water Restriction By-law".

READ A FIRST AND SECOND TIME 14th DAY OF Aug, 2002

READ A THIRD TIME AND FINALLY PASSED THIS 14th DAY OF Aug, 2002


MAYOR - J.C. Ivey


CLERK - Carol McKenzie