

# **AFFORDABILITY AND CHOICE TODAY (A•C•T) STREAMLINED APPROVAL PROCESS PROJECT**

## **Laying the Groundwork: Garden Suites and On-site Septic Systems**

**Harbour Management Services Ltd.  
Oshawa, Ontario**

Prepared for:

**Federation of Canadian Municipalities**

**Canadian Home Builders' Association**

**Canadian Housing and Renewal Association**

**Canada Mortgage and Housing Corporation**

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**Ottawa, Ontario**

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## FOREWORD

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The project documented in this case study received funding assistance under the Affordability and Choice Today (A•C•T) Program. A•C•T is a joint initiative, managed by the Federation of Canadian Municipalities, the Canadian Home Builders' Association, and the Canadian Housing and Renewal Association, together with the funding agency Canada Mortgage and Housing Corporation. The A•C•T Program is administered by the Federation of Canadian Municipalities.

A•C•T, which was launched in January 1990, was designed to foster changes to planning and building regulations and residential development approval procedures in order to improve housing affordability, choice and quality.

Through A•C•T, grants are awarded to municipalities, private and non-profit builders and developers, planners and architects to undertake innovative regulatory reform initiatives in municipalities across Canada. Three types of projects are awarded grants under the A•C•T Program: Demonstration Projects, Streamlined Approval Process Projects, and Case Studies (of existing initiatives).

- *Demonstration Projects* involve the construction of innovative housing that demonstrates how modifications to planning and construction regulations can improve affordability, choice and quality.

- *Streamlined Approval Process Projects* involve the development of a method or an approach that reduces the time and effort needed to obtain approvals for housing projects.
- *Case Study* grants are awarded for the documentation of existing regulatory reform initiatives.

Change and innovation require the participation of all the players in the housing sector. A•C•T provides a unique opportunity for groups at the local level to work together to identify housing concerns, reach consensus on potential solutions, and implement action. Consequently, a key component of A•C•T-sponsored projects is the participation and cooperation of various players in the housing sector in all phases of each project, from development to realization.

All projects awarded a grant under the A•C•T Program are documented as case studies in order to share information on the initiatives and the benefits of regulatory reform with other Canadian communities. Each case study discusses the regulatory reform initiative, its goals and the lessons learned. Where appropriate, the cost savings resulting from modifications in various planning, development, and construction regulations are calculated and reported.



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## PROJECT OVERVIEW

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A survey conducted by Gallup Canada Inc. for Canada Mortgage and Housing Corporation indicates that almost half of the Canadian market for garden suites lies in rural areas, where many lots are serviced by on-site septic systems. However, public health inspectors may require a separate septic system be put in place for a garden suite, based on regulations that exist for other types of housing.

Having to install a separate septic system for a garden suite would compromise its capacity to reduce housing costs, one of its main benefits. In some cases, the host property may not be able to accommodate an additional on-site septic system.

In 1993, Harbour Management Services Ltd. (HMS) was awarded an A•C•T grant to prepare guidelines that would help municipalities to design the necessary regulatory tools to control the use and maintenance of on-site septic systems that service garden suites.

In carrying out the project, HMS consulted with representatives of the following organizations:

- The Association of Supervisors of Public Health Inspectors (Ontario)
- The Town of Clarington
- The Ontario ministries of Housing and the Environment

The guidelines prepared by the project team are aimed at minimizing the effect of garden suites on on-site septic systems, and ensuring a speedy approval process for garden suite applicants. Recommendations

are included, for example, concerning information requirements to evaluate system capacity, water conservation fixtures and devices, and remedial measures to be taken in the event of a system malfunction.

Municipalities in Ontario and in other parts of Canada can use the guidelines as a basis for developing regulations and procedures that will help to ensure access to an affordable housing option for seniors in rural areas.

### *For More Information . . .*

*A number of publications are available from Canada Mortgage and Housing Corporation related to garden suites and on-site septic systems:*

- *The Complete Guide to Garden Suites*
- *Criteria for Garden Suite Regulations, A•C•T Case Study, Harbour Management Services Ltd.*
- *Regulations for Garden Suites, A•C•T Case Study, Tantramar Planning District Commission*
- *Technical Impediments to Use of the Existing On-site Sewage System of Host House to Service Garden Suite on Same Property, Technical University of Nova Scotia, Centre for Water Resources Studies*
- *Remediation of Septic Fields Through Flow Reduction Techniques, Technical University of Nova Scotia, Centre for Water Resources Studies*

*Copies of these publications may be obtained from the Canadian Housing Information Centre, 700 Montreal Road, Ottawa, Ontario, K1A 0P7, Tel: (613) 748-2367, Fax: (613) 748-4069, TTY: (613) 748-2143.*



## 1.0 PROJECT DESCRIPTION

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### 1.1 Keeping Garden Suites Affordable

A relatively new concept that can help meet the housing needs of seniors is the garden suite. A garden suite is a temporary dwelling, usually located on the lot of a close relative's home. Intended for one or two occupants, a garden suite offers a number of benefits:

- Seniors can access support and companionship while maintaining an independent lifestyle.
- Seniors can use the equity in their current homes to enhance their incomes.
- The cost of housing seniors in garden suites can be much lower than the cost of institutional care.
- Seniors occupying large homes can be provided with a desirable alternative, making large homes available for families with children.

A survey conducted by Gallup Canada Inc. for Canada Mortgage and Housing Corporation indicates that almost half of the Canadian market for garden suites lies in rural areas, where many lots are serviced by on-site septic systems. However, public health inspectors may require a separate septic system be put in place for a garden suite, based on regulations that exist for other types of housing. This would increase the cost of installing a garden suite significantly, and compromise its affordability for many seniors.

### 1.2 Project Objectives

In 1993, Harbour Management Services Ltd. (HMS) was awarded an A•C•T grant to prepare guidelines that would help municipalities to design the necessary regulatory tools to control the use and maintenance of on-site septic systems that service garden suites.

The objectives of the project were to:

- identify the requirements of Ontario public health inspectors and relevant provincial ministries
- prepare guidelines to assist municipalities in developing regulations and procedures
- conduct an awareness program with Ontario public health inspectors

### 1.3 Project Methodology

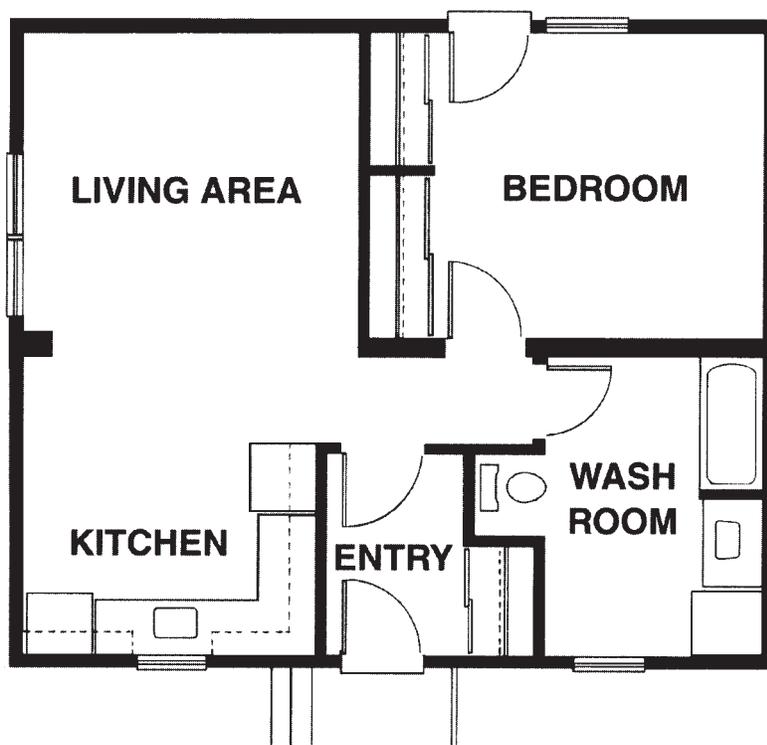
HMS consulted with representatives of the following organizations in carrying out the project:

- The Association of Supervisors of Public Health Inspectors (Ontario) (ASPHIO)
- The Town of Clarington
- The Ontario ministries of Housing and the Environment

HMS prepared draft guidelines for review by the project team, and circulated the guidelines to all public health units in Ontario. Several presentations were made to members of ASPHIO in order to communicate the benefits of garden suites to public health inspectors.

The results of the project are summarized in the following section.

**Figure 1. Example of a Garden Suite: A Demonstration Unit in Fredericton, New Brunswick**



*Source: Canada Mortgage and Housing Corporation, The Complete Guide to Garden Suites, p. 6-11.*

## 2.0 FINDINGS AND RECOMMENDATIONS

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### 2.1 Primary Considerations

When considering the installation of a garden suite on a lot serviced by an on-site septic system, the ability of the existing system to handle a potentially increased load is a primary concern.

The project team found that the factors affecting the condition and capacity of an existing on-site septic system are very site-specific, making it difficult to assess its ability to accommodate an additional load. However, water conservation measures can significantly reduce hydraulic load, and in some cases may offset completely the increased load that might otherwise have been generated by a garden suite. In addition, the effect of the garden suite on pollution load can be minimized or eliminated by regular maintenance.<sup>1</sup>

Therefore, the guidelines prepared by the project team are aimed at helping the municipality to assess the capacity of the existing on-site septic system, and encouraging water conservation and maintenance to minimize the effect of the garden suite on hydraulic and pollution loads. The guidelines,<sup>2</sup> which are

summarized in the following section, are intended as additional criteria to be considered in conjunction with *Criteria for Developing and Implementing Garden Suite Legislation*,<sup>3</sup> by municipalities that are developing regulations for garden suites.

### 2.2 Conditions of Approval

The project team recommended that the following conditions of approval would help to ensure adequate levels of health and safety:

- To ensure that the capacity of the on-site septic system to accept an additional hydraulic load is assessed accurately, the applicant should empty the septic tank, and where considered advisable, surcharge the tank to more than 682 litres (150 gallons).
- In the event that the capacity of the existing system cannot be satisfactorily determined, consideration should be given to installing a second tank and increasing the length of the existing leach bed if lot space allows.

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<sup>1</sup> The project team's findings are supported by two studies prepared by the Centre for Water Resources at the Technical University of Nova Scotia, *Remediation of Septic Fields Through Flow Reduction Techniques*, and *Technical Impediments to Use of the Existing On-Site Sewage System of Host House to Service Garden Suite on Same Property*. Copies of these reports may be obtained from the Canadian Housing Information Centre, 700 Montreal Road, Ottawa, Ontario, K1A 0P7, Tel: (613) 748-2367, Fax: (613) 748-4069, TTY: (613) 748-2143.

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<sup>2</sup> The guidelines are documented in the project team's final report, *Criteria for Inclusion in a By-law to Permit the Deployment of Garden Suite Units on Residential Lots Serviced by An On-site Sewage System*, prepared by Harbour Management Services Ltd., P.O. Box 44024, Grandview Station, Oshawa, Ontario, L1H 8R5, Tel: (905) 725-0726, Fax: (905) 432-3645. A copy of the report may be obtained on loan from the Canadian Housing Information Centre.

<sup>3</sup> *Criteria for Developing and Implementing Garden Suite Legislation* and the case study documenting the previous A•C•T project, *Criteria for Garden Suite Regulations*, are available through the Canadian Housing Information Centre.

- Measures to reduce water consumption should be taken. Ideally, both the garden suite and the host residence should be equipped with low-flow toilets and other water-conserving devices. The host residence should be fitted, at a minimum, with low-flow showerheads, and all sinks should be fitted with aerated faucets.

*Up to 45 percent of wastewater is generated through the toilet, which means there is significant potential for reducing the impact on the on-site septic system through the installation of low-flow toilets. Replacing fixtures in the host residence would be considerably more cost-effective than installing a second septic system.*

—Wilfred Gillberry,  
Harbour Management Services Ltd.

### 2.3 Application and Approval

The project team recommended that a questionnaire, an agreement between the applicant and the municipality, and a certificate of approval for an additional septic tank and field, could be used to help ensure a speedy approval process and allow the municipality to maintain the standards set to safeguard the health of its residents.

#### *Questionnaire*

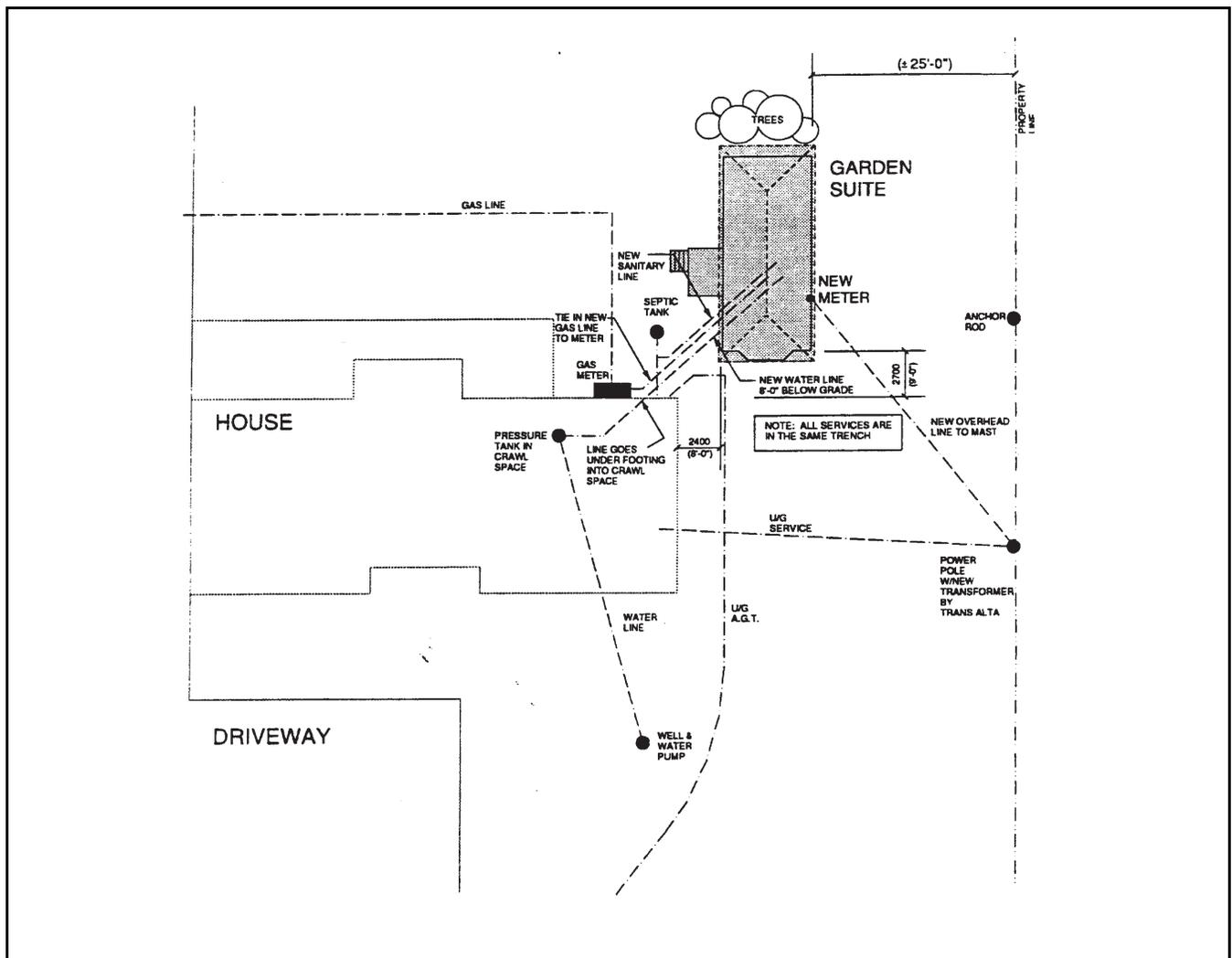
A questionnaire, completed by the applicant, could help health officials in assessing an application to install a garden suite serviced by an on-site septic system. Applicants would be required to provide the following information:

- Copies of documentation concerning the septic system indicating its age; size and make; the name of the contractor who installed and/or maintains the system; a scale diagram of the system; and its location, which may be indicated on a site plan (refer to figure 2)
- Copies of maintenance records indicating when and by whom the septic tank was last emptied, and when and by whom the tank was last inspected

Applicants should also provide details relating to the host residence, including:

- Date of construction of the host residence, and of any subsequent renovations to the dwelling
- Number of occupants
- Number of bedrooms
- Number of bathroom, washrooms and plumbing fixtures, indicating size of flush tanks and water-conserving fixtures or equipment installed
- Number of kitchens and number of sink compartments
- Details of any recreational spa fixtures or features (e.g. jacuzzi, hot tub, sauna)
- Details of washing machine(s), including manufacturer and model, water consumption per load, and approximate number of loads per week
- Details of dishwashing machine(s), including manufacturer and model, water consumption per load, and approximate number of loads per week
- Whether a garburator unit is installed
- Whether storm drainage is connected to the septic system

Figure 2. Example of a Site Plan: A Demonstration Unit in Parkland, Alberta



Source: Canada Mortgage and Housing Corporation, *The Complete Guide to Garden Suites*, p. 6-14.

### *Agreement Between Applicant and Municipality*

The project team recommended that applicants should enter into an agreement with the municipality that would include the following provisions:

- In the event of an on-site septic system failure, the applicant will immediately notify the local public health department, and take remedial action deemed necessary by the department, including enlargement or replacement of the system
- The applicant agrees that until remedial action is taken, the septic tank will be used as a holding tank, and the leach bed will not be used
- The applicant will provide a letter of guarantee, performance bond, or similar financial instrument (in an amount to be determined by the municipality on

advice from the local health department), payable to the municipality in the event of an on-site septic system failure, if the homeowner fails to take remedial action required by the public health inspector. The cost of providing the letter of guarantee would be borne by the applicant.

### *Certificate of Approval*

The project team also recommended that the homeowner should apply for a certificate of approval for an additional septic tank and field to service the host residence and the garden suite. In this way, the suitability of the site (lot size and soil conditions) will have already been established, and the option of installing a second system could be exercised without delay, if a malfunction of the existing system does occur.

## 3.0 THE KEY PLAYERS

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### 3.1 Harbour Management Services Ltd.

Harbour Management Services Ltd. is an affiliate of Garden Units Leasing Limited (GULL), a building and land development consulting company based in Oshawa, Ontario.

HMS is a strong supporter of the garden suite as an affordable housing option for seniors. The company has researched and collected information about garden suites and has promoted the concept to the public and all levels of government for a number of years.

In addition to preparing the draft guidelines, HMS explored the implications of legislating occupancy restrictions for garden suites in Ontario, since the demand placed on an on-site septic system is directly affected by the number of occupants it services and their lifestyles. HMS submitted a presentation to the standing committee reviewing the Residents' Rights Bill (Bill 120), the provincial legislation affecting garden suites in Ontario.<sup>4</sup>

### 3.2 The Association of Supervisors of Public Health Inspectors (Ontario)

Membership in ASPHIO is open to all those immediately responsible for giving direction to public health inspection programs of local health agencies in Ontario. The Association's objectives are outlined below:

- To provide a recognized organization which can bring together persons immediately responsible for public health inspection programs for discussion on matters of common interest
- To promote public health inspection programs affecting the Ministry of Health, other ministries and local health agencies
- To represent all members in liaison with other associations or societies
- To provide regular updates of information on the activities of the Association to each of the directors of member health units
- To act as a resource group on all matters that fall within the competence of the Association

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<sup>4</sup> *The Complete Guide to Garden Suites*, available through the Canadian Housing Information Centre, discusses occupancy restrictions. Refer to footnote 1 for details on obtaining a copy of the report.

## 4.0 REGULATORY REFORM INITIATIVES AND IMPACT ON HOUSING COST, CHOICE AND QUALITY

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The proportion of the Canadian population over 65 years of age is growing faster than any other segment. By 2001, Canada's male population over 65 years of age will be double that of 1971. The female population over 65 years of age will increase 2.5 times over the same period. One third of male seniors, and half of female seniors, will be over 75 years of age.<sup>5</sup> Correspondingly, the demand for housing that meets the special needs of seniors is on the rise.

Garden suites have significant potential to increase housing affordability, choice and quality for seniors. However, requiring the installation of a separate septic system for a garden suite would mean that one of its main benefits—reduced cost—would be compromised. In those cases in which the host property could not accommodate an additional on-site septic system, access to the housing option would be denied.

According to ASPHIO, a separate septic system could add \$3000 to \$5000 to the cost of a garden suite. The project team estimates that, by comparison, the host residence could be equipped with water-conserving fixtures for \$300 to \$500 in order to reduce hydraulic load.

With appropriate regulations and procedures in place to control the use and maintenance of on-site septic systems servicing garden suites, municipalities can help to ensure access to an affordable housing option for seniors in rural areas.

Municipalities in Ontario and in other parts of Canada can use the guidelines developed through A•C•T as a basis for creating garden suite regulations and procedures that meet the specific needs of their own communities.

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<sup>5</sup> Figures provided by Harbour Management Services Ltd., extrapolated from Canada Mortgage and Housing Corporation and Statistics Canada data.

