CONTENTS

COST SHARING ARRANGEMENTS USED BY SELECTED LOCAL GOVERNMENT ROAD AGENCIES
(Prepared by Ian G. Heggie, revised March 1999)

Introduction .........................................................................................................................2
Examples of Cost Sharing Arrangements for Maintenance.............................................2
Examples of Cost Sharing Arrangements for Investment................................................3
Attachment: Contract Agreement Requiring a Developer to Provide Roads and Other Basic Infrastructure........................................................................................................5
Annex  A: Agreement Entered into in the City of Marieville, Quebec Province ........8
Annex  B: Agreement Entered Into in the City of Marieville, Quebec Province.......11
COST SHARING WITH LOCAL GOVERNMENT ROAD AGENCIES

Introduction

The road fund normally finances 100 percent of costs on national roads but, since it generally finances only part of the maintenance and investment costs on local government roads, it has to establish cost-sharing arrangements with local government road agencies. Since local roads benefit not only road users but also adjoining landowners, costs are usually shared between the two (through local property taxes). Cost-sharing arrangements normally consider two factors: (i) the revenues needed to fully finance the local government’s road program; and (ii) what the local government can afford to finance from its own resources. This affordability is largely related to the extent of fiscal decentralization and depends on which sources of taxation have been delegated to local governments. Some countries have adopted novel forms of cost sharing where they will only finance certain types of expenditures, leaving local governments to finance the balance. For example, Korea expects provinces to finance all land acquisition costs, while in Zambia, when work is done using force account, the road fund only finances the costs of materials and hired equipment.

The revenues required to maintain local government roads are estimated using benefit-cost analysis and formula-based or needs-based methods. Affordability is generally measured in terms of the local property tax base. The larger is the tax base, and hence the wealthier is the local government jurisdiction, the smaller is the amount financed by the road fund. When the tax base is not known, affordability is often measured indirectly in terms of population density or number of people served by the road.

When the road fund is first set up it will often finance all road expenditures—or at least all maintenance expenditures—and will move toward an agreed cost-sharing formula over a period of two to five years. Thereafter, the formula should be reviewed and, if needed, amended annually. Typically, the road fund will finance 50 percent of the costs of maintaining urban roads and 60 percent of the costs of maintaining rural roads. For investments like rehabilitation and upgrading the proportions may be higher. In the case of unclassified roads, to which local communities contribute by offering volunteer labor or other in-kind services, the proportion financed by the road fund may be lower, reflecting the difference between the market wage and the opportunity cost of labor in the countryside.

Examples of Cost Sharing Arrangements for Maintenance

CANADA. Several provinces share maintenance costs with local authorities. Ontario provides basic funding that can be used to finance maintenance. Cost-sharing is generally 50 percent for urban municipalities. For rural municipalities it is based on ability to pay, with the province generally paying 60 percent of costs. For unincorporated areas, that is, roads managed under local road boards, the province meets two-thirds of basic maintenance costs.

JAPAN. The central government finances half the costs of maintaining directly managed national highways. The remainder is financed by prefectural governments and designated large cities.
**New Zealand.** The road fund finances part of the costs of maintaining local authority roads. The proportion financed is equal to \( k_1 + k_2 \log \left( \frac{P}{LV} \right) \), where \( P \) is the current year allocation (thousands of dollars), \( LV \) is the three-year average net equalized land value (the local property tax base in millions of dollars), and \( k_1 \) and \( k_2 \) are constants computed to ensure that the average national proportion is 50 percent. They effectively draw a graph of the percentage financed by the road fund \((y)\) versus the program size divided by the tax base \((x)\). The graph rises upwards from the left (richest authority) to the poorest on the right. The minimum allocation for the richest authority has traditionally been set at 43 percent. The slope of the line is then changed until the average cost share is 50 percent. If the calculation in any one year results in a proportion that differs by more than 2 percent from the previous year’s, the proportion is adjusted by half the difference to be within 2 percent of the indicator. If the calculation results in a difference of less than 2 percent, no change is made unless the trend continues for two consecutive years. The actual proportions in 1996–97 varied from 43 percent to 83 percent (the latter being an offshore island, which is an exception).

**Finland.** FinnRA and local authorities provide funds for maintaining unclassified roads managed by road cooperatives. FinnRA finances the following amount per km: \( (0.75 \times L \times $800 \times C) \times (L - 0.1 \times R) \), where 0.75 is the maximum proportion of costs to be financed, \( L \) is the length of the road, \$800 is the estimated average maintenance cost per km, \( C \) is the maintenance class of the road \((C = 1.50 \text{ for class 1 roads, } 1.25 \text{ for class 2 roads, } 1.00 \text{ for class 3 roads, and } 0.75 \text{ for class 4 roads})\) and \( R \) is the number of permanent residents living along the road. In 1990 FinnRA and the municipalities financed 25 percent and 33 percent, respectively, of the maintenance costs of these roads.

**Examples of Cost Sharing Arrangements for Investment**

**Canada.** Provinces also provide funds for new investment. The basic funding in Ontario can be used for either maintenance or new investment on the same cost-share basis. Supplementary funds are available for specific capital projects and under various special programs. Under the strategic transportation improvement program costs are shared equally among the federal government, the province, and the municipality. For unincorporated areas, that is, roads managed under local road boards, the province meets two-thirds of basic construction costs and finances 100 percent of specific projects.

**Japan.** The central government finances two-thirds of the costs of improving directly managed national highways, 70 percent of the national expressway network, and half the costs of subsidized national highways, main local (prefectural) roads, and main local (municipal) roads.

**Jordan.** The Irbid municipality charges part of the costs of road and street improvements to adjoining property owners. It charges 10 percent of the costs of upgrading and widening to landowners on each side of the road, the entire cost of constructing sidewalks, and if the land-take is greater than 25 percent of an individual’s holding, they pay compensation only for the excess over 25 percent.

**New Zealand.** Funds for investment are provided on the same cost-share basis as for maintenance, plus 4 percent. So the authority which receives 43 percent for maintenance, will receive \((43 + 4)\) for investment.

**Canada.** The municipality of Marieville in Quebec takes a slightly different approach, although it is by no means an exception. It requires anyone developing property to provide all the basic infrastructure services to specifications laid down by the municipality (including roads). After completion, staff from the municipality inspect the completed works to ensure they have been constructed according to specification and the municipality then “adopts” the facilities and takes
over responsibility for their maintenance and the costs of any future upgrading. So the municipality charges 100 percent of the costs of any new road scheme to the developer. The contractual arrangements under which it does this are in the Attachment.
ATTACHMENT

CONTRACT AGREEMENT REQUIRING A DEVELOPER TO PROVIDE ROADS AND OTHER BASIC INFRASTRUCTURE

MARIEVILLE

692 SAINT-CHARLES, MARIEVILLE, QUEBEC, JOL IJO- TEL. (514) 460-4444

OFFICE OF THE CLERK

Excerpt from the minutes of a special meeting of the Marieville City Council held at the City Hall on March 26, 1990. Present were: Her Honor the Mayor, Mrs. Marie-Claire Pelletier and council members Jocelyne Rainville, Lilianne Sansoucy, Robert Savoie, forming a quorum. The meeting was chaired by Alternate Mayor Marie-Claire Pelletier. Me Pierre Dureault, Clerk, was also present.

Resolution #90-168

REGULATION NUMBER 639-90

concerning the financing of public service infrastructures

WHEREAS the construction of new housing estates or buildings requires the installation of one or more municipal public services, namely, water and sewerage systems, storm drains, auxiliary services (connections), pavement, curbstones, sidewalks, lighting;

WHEREAS the installation of the said public services by the City Hall requires investments and expenditures that affect the city’s credit and borrowing capacity;

WHEREAS it is important to maintain the city’s level of indebtedness at the minimum;

WHEREAS the Council wishes to amend its policy relating to cost-sharing of city services by Applicants;

WHEREAS by virtue of Article 470 of the Law concerning Towns and Cities, the Council may, by regulation, determine the guarantees that shall be provided by any person at whose request the Council has ordered that the municipal works be implemented for new constructions on land, subject of the request;

WHEREAS a motion on this regulation was introduced on March 5, 1990 by Jacques Verronneau, proposed by Jocelyne Rainville and seconded by Robert Savoie, it was unanimously resolved that the City of Marieville pass this regulation number 639-90 as follows:
ARTICLE 1: DEFINITIONS

Unless the context shall otherwise require, the following terms, words and expressions shall have the meanings set forth in this article.

“Municipal public services” shall comprise notably: water and sewerage system, storm drain, auxiliary services, street foundation, pavement, concrete curbs, sidewalks and lighting.

“Applicant” shall mean any person at whose request the Council orders the execution of municipal works for new construction on land, subject of the request.

ARTICLE 2

All applicants shall first submit, for approval, a plan for land division and development in conformity with Article 2.6.1C of housing estate regulation number 559.

ARTICLE 3

The Applicant shall pay to the City in advance, 7% of the cost of the works according to the written estimate prepared by the Director General as a guarantee, either in cash or by manager’s check or in the form of an irrevocable letter of credit made payable to the City.

ARTICLE 4

Upon payment of the amount of the guarantee established in Article 3 above, the Council shall, within the following 45 days, commission an engineering firm to prepare the plans and estimates.

ARTICLE 5

If the project is not implemented for reasons beyond the City’s control, the latter shall keep the amount of the guarantee. Otherwise the City shall return the uncommitted portion of the guarantee to the applicant.

ARTICLE 6

Within 60 days following the deposit of the plans and budget estimates, the Applicant shall notify the Council of his intention to either:

♦ carry out the works himself in conformity with the plans and estimates under the terms and conditions of Annex “A”;
♦ request that the city carry out the works and defray the costs under the terms and conditions of Annex “B”;

Should the applicant fail to exercise this right within the prescribed period, he shall be considered as having given up the idea of implementing the project and the amount
deposited as a guarantee shall be kept by the City. The institution that issued the letter of credit, shall make payment to the City upon request.

ARTICLE 7

Should the applicant elect to implement the works at his own expense, he shall deposit a signed copy of the agreement attached in Annex "A", while notifying the City of his decision in writing.

ARTICLE 8

Should the applicant elect to ask the City to carry out the works, he shall deposit a signed copy of the agreement attached in Annex “B” while notifying the City of his decision.

ARTICLE 9

This regulation shall enter into force in compliance with the Law.

Pierre Dureault (Sgd)               Marie-Claire Pelletier (Sgd)
                                      Clerk                             Mayor
ANNEX A

AGREEMENT ENTERED INTO IN THE CITY OF MARIEVILLE,
QUEBEC PROVINCE

by and between

THE CITY OF MARIEVILLE (hereinafter called “The City”), a legally
constituted city corporation with registered offices at 682, rue St-Charles, represented by
Her Honor the Mayor and its Clerk, who are both duly authorized to sign this agreement
under the terms of a resolution adopted at a Council meeting and attached hereto,

and

_______________________ a firm legally constituted pursuant to__________________,
with registered offices at___________________ and represented herein by____________

who is duly authorized to act on its behalf in accordance with a resolution adopted by the
Board of Directors, a copy of which is attached hereto;

or

___________________ residing at___________________________________________

hereinafter called “The Applicant”

WHEREAS for the implementation of the above project, the Applicant has
requested The City’s permission to carry out or to cause to be carried out the requisite
works for the installation of municipal public services provided for in the plans and
estimates prepared by ___________________________________________________-

WHEREAS the Applicant is prepared to carry out cause to be carried out the
works and defray the costs;

WHEREAS the installation of the services that the Applicant will execute or cause
to be executed shall not be subject to any service charges until such time as they shall
require repairs following normal wear and tear,

In consequence whereof the parties have agreed as follows:

1 PREAMBLE

The preamble shall form an integral part of this Agreement

2 CITY AUTHORIZATION
The City hereby authorizes the Applicant to implement the works needed to install the services as described in this agreement.

3 APPLICANT’S OBLIGATIONS

3.1 The Applicant, shall execute or cause to be executed, at his expense, all the works required to install the aforementioned services, all of which shall be done according to the plans and estimates prepared by________________. Any modification to the plans and estimates shall be subject to prior approval by the City. All the works described in the plans and estimates shall be completed within 18 months of the signing of this agreement.

3.2 The Applicant shall, before the works begin and upon request, deposit the sum of _$____________ as security for payment of professional, supervision and lab test fees. The City shall appoint the engineer who shall supervise the project and issue the project completion certificates.

3.3 The Applicant shall give The City a work implementation schedule before the start of the above works.

3.4 The Applicant shall bear the costs incurred by the City such as tests, trials, professional fees for the modification of the original plans and estimates. Such expenses shall be reimbursed within thirty days following the dispatch of the invoice.

3.5 Before the work begins, the Applicant shall provide the City with a third party insurance policy for at least $ 1000 000 which should remain valid for the duration of the works.

3.6 The Applicant shall, before the works begin, provide the City with two (2) sureties, namely:

One (1) surety guaranteeing the full payment of the materials and manpower;

The surety should remain in effect until the City obtains evidence that all the contractors and sub-contractors as well as the materials have been paid.

One (1) surety guaranteeing that the works will be fully implemented in accordance with the plans and estimates. This performance bond shall be equal to 50% of the cost of the works.

3.7 The Applicant shall submit to the City, for provisional acceptance, the completed works and, if necessary, shall complete the works if they do not correspond to the plans and specifications; following which the City shall proceed with the final acceptance.
3.8 A surety equal to 5% of the cost of the works shall be valid for a period of one year from the date of the final acceptance by the engineer who supervised the project.

3.9 The Applicant shall hand over free of charge to the City, not later than 90 days after the final acceptance of the works, the streets and all the works, together with vouchers and titles and shall provide evidence that all the contractors and materials have been paid. Following the handover, the City shall take charge of the street and services.

4 OBLIGATIONS OF THE CITY

The City hereby undertakes to:

4.1 Supply and transmit, in the shortest time possible, to the Applicant, the plans, estimates and any information in its possession that will help in carrying out the above-mentioned works, subject of this agreement.

4.2 Adopt all the resolutions, sign all the documents needed to make this agreement fully effective and facilitate the implementation of the proposed works.

4.3 Return the unutilized balance, if any, of the deposit for professional fees.

5 ENTRY INTO FORCE

This agreement enters into force immediately

CITY OF MARIEVELLE THE APPLICANT

_____________________ ______________________

_____________________ ______________________
ANNEX “B”
AGREEMENT ENTERED INTO IN THE CITY OF MARIEVILLE,
QUEBEC PROVINCE
by and between

THE CITY OF MARIEVILLE, hereinafter called the City, a legally constituted city corporation with registered offices at 682, rue St-Charles, represented herein by Her Honor the Mayor and by City Clerk, who are both duly authorized to sign this agreement under the terms and conditions of a resolution adopted at a Council meeting and attached hereto,

and

____________________a firm legally constituted pursuant to ___________________and herein represented by_____________________ who is duly authorized to act on its behalf in accordance with a resolution adopted by the Board of Directors, a copy of which is attached hereto,

or

__________________residing at_____________________________________
hereinafter called “The Applicant”,

WHEREAS the Applicant has submitted to the City a project to install city services for _____________________________________________________streets

WHEREAS The City has authorized the installation of infrastructures to serve the above-mentioned project and decree a special charge by virtue of Regulation number ____;

WHEREAS the Applicant wishes to pay the City the cost of the municipal public services needed for the implementation of the said project according to the provisions of article 547.1 et seq. of the Law concerning Cities and Towns;

THE PARTIES HAVE AGREED AS FOLLOWS:

ARTICLE 1: DEFINITIONS

For the purposes of this agreement, unless the context requires otherwise, the following terms and words shall have the following meanings:

1.1 “WORKS COMPLETION DATE”: shall mean the date on which the engineer responsible for supervision of the works, signs the provisional certificate of acceptance of the works.
1.2 “LETTER OF GUARANTEE” shall mean the unconditional and irrevocable letter attached to this convention or any other that may replace it in compliance with the provisions of this agreement.

ARTICLE 2: REGULATIONS AND PLANS

The Applicant declares having examined regulation number_________ authorizing the implementation of the municipal public services works required for the project’s implementation and is fully satisfactory, in particular as regards the works to be implemented under the terms of said regulation and according to the mode of financing stated therein.

ARTICLE 3: APPLICATION OF THE REGULATION

3.1 The City will ensure the enforcement of Regulation No.______ as soon as possible, inasmuch as the Applicant fulfills all his obligations to the City.

3.2 It is understood between the parties to this agreement that this article may not be interpreted as restricting the rights of the City to interrupt, suspend pursue or undertake the works referred to in Regulation No. ___ should the circumstances so require; the City may not be held liable for any damage or assume any responsibility or be subject to any action because of any delay whatsoever occur during the implementation of the works.

3.3 The implementation by the City of the works proposed under Regulation No.______ is conditional to:

1 the prior transfer by the Applicant of the network of streets and crossings as well as any services required for the completion of the works involved under this regulation;

2 the recording of the survey approved by the City for the project;

3 transfer or payment, depending on the case, of the space required for parks and playgrounds in accordance with the laws in force.

ARTICLE 4: PAYMENT OF THE COST OF WORKS FOR PUBLIC UTILITIES

4.1 The Applicant shall pay the City, within the time period prescribed by Article 547.1 of the Law on Cities and Towns, the cost of the works needed to implement the project;

4.2 The cost of the works needed for project implementation is the cost of the works and technical charges, experts’ fees, legal fees, surveyor fees, lab and engineering fees, the interests and contingencies mentioned in Regulation no.______.
The Applicant shall pay the City the cost of the works needed for project implementation as described in the preceding paragraph, in the first of the following events:

1. before the publication or authorization mentioned in the second paragraph of Article 547.1 of the Law concerning Cities and Towns;

2. not later than 10 days following the sale of a plot, the amount of the special tax charged for said plot by Regulation No. ________;

3. before the issuing of any building construction permit, the amount of the special tax charged for the plot by the Regulation relating to said construction;

4. Not later than one year following the completion of the works, the balance of the cost of the works required for project implementation.

ARTICLE 5: IRREVOCABLE LETTER OF GUARANTEE

5.1 As a guarantee to the City that the Applicant will fulfill his obligations under Article 4 of this agreement, he will deliver to the City before the commencement of the works, an irrevocable bank guarantee letter ____________________ for a sum equivalent to the cost of the works, i.e. $______________.

5.2 The said letter of guarantee shall become effective upon approval, by the Minister of Municipal Affairs, of Regulation No. _______________, and shall remain valid until the 380th day following the completion of the works.

5.3 The letter of guarantee issued pursuant to Article 5.1 of this agreement should remain valid for a period of 380 days following the completion of the works. If the letter is issued for a shorter period, the Applicant shall obtain an extension of the said letter or a new letter of replacement not later than twenty days before it expires. The Applicant undertakes to transmit to the City, at least twenty (20) days before the expiration of this letter of guarantee (or, should the need arise, any other letter of guarantee replacing it) or any period of renewal, a certificate from the issuing institution of this letter of guarantee (or of any letter of guarantee replacing it, if necessary), attesting to its renewal. Nothing in this agreement shall prevent the Applicant from replacing this letter of guarantee with another issued by another financial institution recognized by the City within the twenty (20) days preceding the period of the above-mentioned twenty-(20) day period. Whenever this letter of guarantee is renewed or replaced under the terms of this paragraph,
the Applicant may have it drawn up in the amount indicated in paragraph 5.1 of this agreement minus any amount already collected by the City following a payment made by him in pursuance of Article 4 of this Agreement or by reason of default in accordance with paragraph 6.1 of this agreement.

ARTICLE 6: DEFAULT

6.1 Should the Applicant fail to fulfill his obligations under Articles 4 and 5.3 of this agreement, over and above any penalties provided for by the law, the City may, after notifying the Applicant within ninety-six (96) hours of the default, and without any other formal procedure, contact the financial institution that issued the letter of guarantee for the Applicant and require said institution to make an immediate payment to the city, of the unpaid amount up to and not exceeding the amount stated in the letter of guarantee; when calculating the aforementioned period, non legal days shall be excluded.

ARTICLE 7: NON-IMPLEMENTATION OF PUBLIC UTILITY WORKS

If the City, for reasons beyond its control, does not undertake or pursue the implementation of the works scheduled in Regulation No. _____ within four (4) months following the entry into force of this agreement, the parties thereto recognize that they will be relieved of their obligations arising from this agreement. In that event, the City shall not be held liable for any damage or assume any responsibility nor be subject to any recourse whatsoever.

ARTICLE 8: ENTRY INTO FORCE

This agreement shall enter into force upon signature.

ARTICLE 9: TRANSFER

The Applicant may not assign or transfer his obligations arising from this agreement in part or in full without the explicit consent of the City.

This agreement shall be binding on the parties thereto as well as their, heirs, successors and legal representatives.

IN FAITH WHEREOF, this agreement was signed in Marieville on this___________ day of ______________19___

City of Marieville The Applicant

____________ ______________