

# INTERPRETIVE GUIDE

TO THE 2005 CONSTRUCTION COST  
REPORTING GUIDE



# T A B L E O F C O N T E N T S

## INTERPRETIVE GUIDE TO THE 2005 CONSTRUCTION COST REPORTING GUIDE

<b>INTRODUCTION</b> .....	<b>1</b>
SCOPE AND PURPOSE OF THIS GUIDE .....	1
<b>REPORTING CONSTRUCTION COSTS</b> .....	<b>2</b>
STANDARDS FOR REPORTING COSTS.....	2
STRUCTURES VERSUS MACHINERY COSTS .....	2
THE ASSESSOR’S AUTHORITY TO REQUEST INFORMATION .....	2
CONFIDENTIALITY OF INFORMATION .....	2
<b>ASSESSABLE COSTS</b> .....	<b>3</b>
FROM PROJECT COST TO ASSESSABLE COST .....	5
<b>INCLUDED COSTS</b> .....	<b>5</b>
<b>DIRECT COSTS VERSUS INDIRECT COSTS</b> .....	<b>5</b>
CONSULTING FEES .....	5
WORKING MODELS.....	5
SITE PREPARATION.....	6
FREIGHT CHARGES .....	6
TEMPORARY FACILITIES .....	6
TESTING.....	6
SITE IMPROVEMENTS .....	6
RETAINING WALLS, REINFORCED EARTH WALLS, AND EARTH BERMS .....	6
FIRE PROTECTION .....	6
COMMUNICATION SYSTEMS.....	7
COMPUTER COSTS .....	7
STANDBY EQUIPMENT .....	7
CRANES AND CRANEWAYS .....	7
<b>EXCLUDED COSTS</b> .....	<b>8</b>
<b>PRE-CONSTRUCTION AND POST-CONSTRUCTION COSTS</b> .....	<b>8</b>
<b>PRE-CONSTRUCTION ACTIVITIES</b> .....	<b>8</b>
FEASIBILITY STUDIES .....	8
CANCELLATION CHARGES .....	8
<b>POST-CONSTRUCTION ACTIVITIES</b> .....	<b>8</b>
COMMISSIONING, PRE-PRODUCTION RUNS, AND START-UP.....	8
<b>PROPERTY THAT CANNOT BE ASSESSED</b> .....	<b>8</b>
ROYALTIES, LICENSES, AND PATENT FEES.....	8

MOBILE EQUIPMENT .....	8
CONSUMABLE MATERIALS .....	8
SPARE EQUIPMENT .....	9
<b>PROPERTY EXEMPT FROM ASSESSMENT .....</b>	<b>9</b>
DESIGN CHANGES, ALTERATIONS, AND MODIFICATIONS .....	9
INTERFERENCE COSTS .....	9
GOODS AND SERVICES TAX (GST) .....	9
IMPORT DUTY AND BROKER FEES .....	9
BONUS OR PENALTY .....	9
COMPUTER COSTS .....	9
<b>ABNORMAL COSTS OF CONSTRUCTION .....</b>	<b>9</b>
TRAVEL COSTS .....	10
TRANSPORTATION COSTS .....	10
INTEREST DURING CONSTRUCTION .....	10
OVERTIME .....	10
PROPERTY TAXES .....	10
<b>GLOSSARY .....</b>	<b>11</b>
<b>REFERENCE .....</b>	<b>12</b>

## INTRODUCTION

### SCOPE AND PURPOSE OF THIS GUIDE

The purpose of this guide is to assist company representatives in providing information needed by assessors to prepare assessments for regulated properties.

The procedures in this guide are intended to be consistent with the value standards prescribed in the *Matters Relating to Assessment and Taxation Regulation*. Issues of assessability are to be determined in accordance with the legislation.

The policies and procedures incorporated in this guide are modeled on the appraisal principle of reproduction cost, subject to divergences necessary to meet the requirements of Alberta's assessment legislation and to provide a stable property tax base.

The costs reported by the application of this guide are used by the assessor to determine the construction cost for property that is not described in Schedule A of the *Linear Property Assessment Manual* or Schedule A of the *Machinery and Equipment Assessment Manual*.

Much of the information used to determine construction cost is derived from the internal records of the company and provided by the company representative to the assessor. A company's internal records may also include project costs that should not be included by the assessor when determining the property assessment. This guide identifies costs that are typically included – as well as costs that are excluded – in the determination of the property assessment.

The principal objectives of this guide are to specify minimum standards for reporting construction costs, and to describe the construction costs that should be included in determining assessable cost.

## REPORTING CONSTRUCTION COSTS

### STANDARDS FOR REPORTING COSTS

The following standards are presented as minimum requirements for reporting construction costs:

- Documentation should represent all construction costs of structures and machinery and equipment. If actual costs are not available, engineering estimates can be provided with a commitment by the company representatives that actual costs will be provided when available.
- Assessors should make initial requests for information when construction begins. Reporting procedures can be agreed upon by the company representative and the assessor. Concerns can be addressed before an assessment is prepared.
- The level of detail reported should be sufficient to ensure the accurate accounting of future additions, the removal of machinery and equipment, or the demolition of structures.
- Costs for large facilities can be reported on an operational unit or process basis. Costs for small facilities can be reported on an item basis, grouped by structure or by process.
- Costs relating to structures should be clearly separated from those relating to machinery and equipment.
- All construction costs should be reported. The company representative should note those costs that the company believes should be excluded from the assessment and cite the appropriate section of this guide or provide a full explanation for the exclusion.
- The net cost of machinery and equipment removed from the facility is deducted.
- The company submission should be signed by a company representative who has authority to make the submission.

An assessor who receives a submission that does not meet these minimum requirements should return it to the company representative with a detailed description of its deficiencies.

### STRUCTURES VERSUS MACHINERY COSTS

It is important to distinguish between the construction costs of structures and the costs of machinery and equipment. Machinery and equipment costs include the cost of any supporting foundations and footings required by the machinery and equipment. Structure costs may need to be prorated and a portion of foundation and footing costs assigned to machinery and equipment.

### THE ASSESSOR'S AUTHORITY TO REQUEST INFORMATION

The company has a statutory duty under the *Municipal Government Act* to provide information to the assessor. The Act authorizes the assessor to request, and requires the company to provide, any information necessary for the assessor to prepare an assessment.

If a company does not provide the requested information by the statutory time frame under section 295(4) of the Act, the company loses its right of complaint to the Municipal Government Board or to an Assessment Review Board. The assessor also has the ability to request and obtain information under sections 294 and 296 of the Act.

### CONFIDENTIALITY OF INFORMATION

All information reported to, or obtained by the assessor for the purpose of preparation of the assessment belongs to the municipality for which the assessor is acting.

This information is subject to access and confidentiality provisions of sections 299 to 301.1 of the *Municipal Government Act*, and, where applicable, the provisions of the *Freedom of Information and Protection of Privacy Act*.

## ASSESSABLE COSTS

The costs of construction to be reported by the company to the assessor are the actual expenditures made in constructing the facility, as referenced in an agreement with the contractor or as incurred by the owner.

Construction costs include all costs of materials and labour required to construct an industrial facility, including the costs required to install production machinery and equipment.

In addition to construction costs directly attributable to the project, reported costs include indirect costs assigned to the project.

Not all construction costs associated with a project are included in the determination of assessable cost. (See Assessable Costs diagram page 5.)

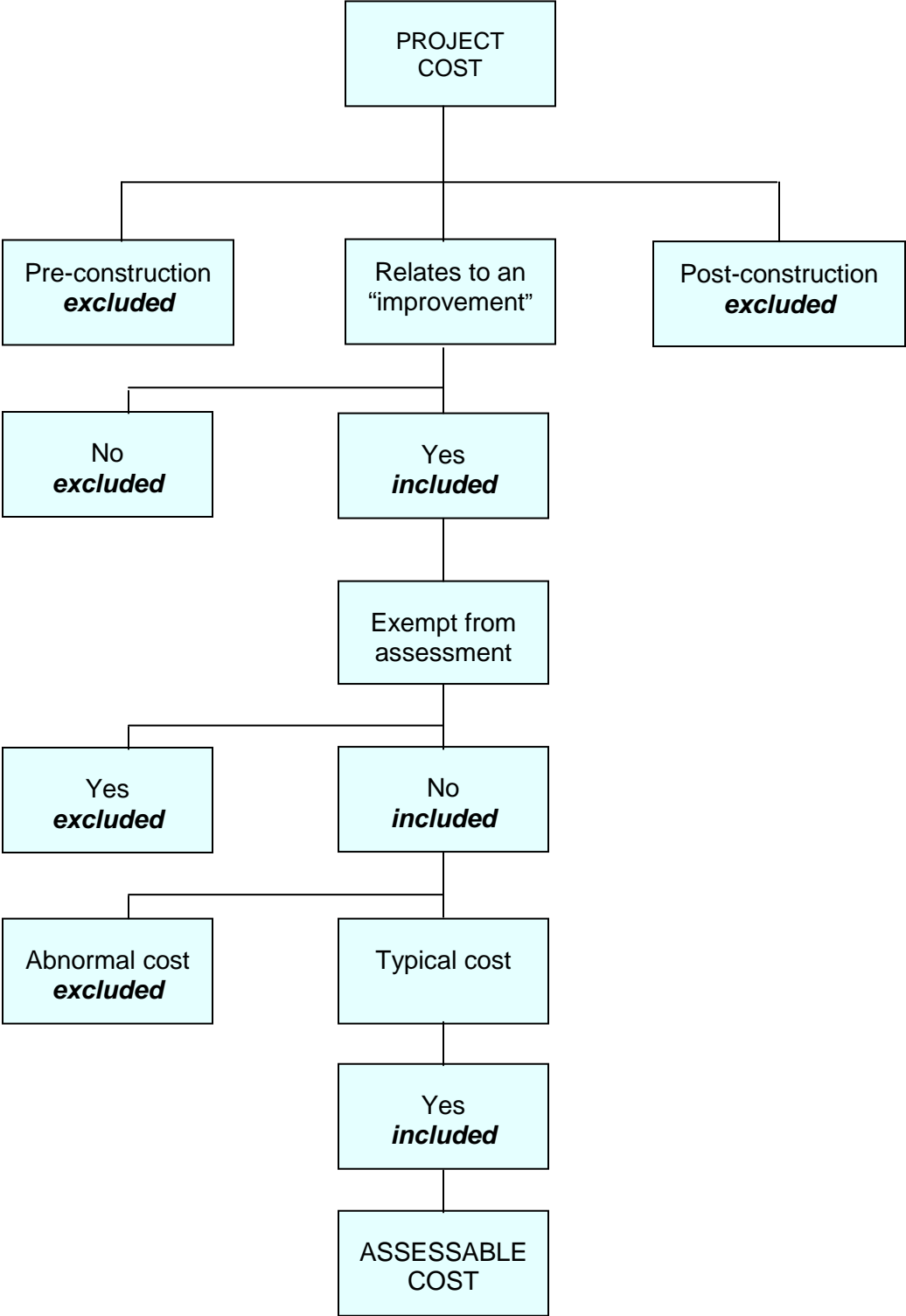
Project costs may be excluded for one or more of the following reasons:

- it is the cost of a pre-construction activity
- it is the cost of a post-construction activity
- it is associated with a component of the project that is not defined as property in the *Municipal Government Act*
- it is associated with property that is made exempt from assessment in the *Municipal Government Act*; and/or
- it is an abnormal cost if
  - in a balanced market it is a cost that would typically not be incurred, and/or
  - it is a cost that is excluded to maintain consistency among regulated properties.





FROM PROJECT COST TO ASSESSABLE COST





## INCLUDED COSTS

### DIRECT COSTS VERSUS INDIRECT COSTS

Construction costs are generally allocated between costs considered to be direct costs and those considered to be indirect costs. Direct costs are costs for labour and materials that can be directly related to the construction of a specific facility. These costs include but are not limited to:

- engineering, survey, and design studies
- staff: including labour, supervision, inspection, janitorial, and security
- materials used for construction
- construction equipment including scaffolding, pumps, tools, and consumable supplies
- handling and storage of materials
- equipment maintenance, repairs, and winterization
- temporary facilities
- security, including yard lighting
- building and site clean-up costs for the building and site, removal of rubbish, etc.
- permits: (building, electrical, etc.), and
- cost to obtain a performance bond.

Indirect costs are costs incurred by the contractor that are allocated to the project as overhead. Indirect costs are also incurred by the company that uses in-house resources to construct a facility.

The assessor should review the submission with the company representative to determine whether in-house staff has been involved in any construction activities. When such activities are identified, an allowance for overhead should be included.

The following list will assist in identifying costs that may be included in contractor overhead and need to be reported by the company for projects constructed in-house:

- general contractor and subcontractor profit
- contractor's overhead including administration costs and head office allocation
- consulting fees
- staff recruitment, and
- insurance (fire, liability, property, etc.).

The following examples of construction costs are NOT intended as an all inclusive list when determining assessable cost.

### CONSULTING FEES

The costs of using consulting architects, engineers, and other specialists to advise on the project are included. An allowance for the costs of in-house consulting services should be included. (See also: *Feasibility Studies*, page 8.)

### WORKING MODELS

The costs of working models to facilitate construction, improve operational efficiency, or train staff during construction are included.

#### SITE PREPARATION

The costs to clear, level, and finish the site to standards typical for industrial property in the area are included. (See also: *Site Improvements, page 6, Retaining Walls, etc., page 6, and Abnormal Costs of Construction, page 9.*)

**Note:** When the land assessment is based on the value of finished industrial land (stripped and graded), the actual site preparation costs are excluded.

The costs to deal with adverse factors, for example topography or soil conditions not ordinarily encountered in construction projects, as well as reclamation costs required to bring the site back to the quality of raw land in the vicinity, are considered abnormal costs and are therefore excluded.

#### FREIGHT CHARGES

The costs of loading and unloading materials and equipment at the site are included. (See also: *Transportation Costs, page 10.*)

#### TEMPORARY FACILITIES

The costs of constructing improvements erected as part of construction and removed following construction, for example offices, warehouses, staff quarters, boundary fencing, and security fences are included. The construction costs of temporary utilities and services are also included.

The construction costs of temporary facilities that are assessed separately from the facility are excluded from the facility's construction cost. When one of these temporary facilities is removed, the remaining net cost is added to the construction cost of the facility. For example:

Assessable cost	\$300,000
Cost recovered from sale	<u>\$200,000</u>
Net cost added to the facility construction cost	\$100,000

In the case of temporary facilities that are leased, the net lease costs are included.

Temporary camp facilities will be assessed separately as long as they are located on the site.

#### TESTING

The costs incurred while testing operating systems and equipment during construction are included. (See also: *Working Models, page 5, Feasibility Studies, page 8, and Commissioning, etc., page 8.*)

#### SITE IMPROVEMENTS

The costs of landscaping, parking lots, lighting, internal roads, and sidewalks are included. (See also: *Site Preparation, page 6, Working Models, page 5, Feasibility Studies, page 8, and Commissioning, etc., page 8.*)

#### RETAINING WALLS, REINFORCED EARTH WALLS, AND EARTH BERMS

The costs of constructing retaining walls, reinforced earth walls, and earth berms are included. (See also: *Site Improvements, page 6.*)

#### FIRE PROTECTION

The construction costs for the facility's fire protection including housings, hydrants, fire lines, and sprinkler systems are included.

#### **COMMUNICATION SYSTEMS**

The construction costs for internal communications systems are included.

#### **COMPUTER COSTS**

The computer costs, hardware and software, incurred during construction to monitor and control construction are included.

The computer costs, hardware and software that are an integral part of an operational unit, for example incurred to monitor, operate and/or control processing systems and equipment, are included. (See also: *Excluded Computer Costs, page 9.*)

#### **STANDBY EQUIPMENT**

The costs of standby equipment forming part of an operational unit intended to maintain continuous operation of a particular function in the event of peak loading or failure of the operational unit, are included.

Typically, standby equipment is found in operation or phases of an operation when it is not feasible to shut down the operation to replace a faulty piece of equipment. Common examples are power generators, pumps, motors, and compressors. (See also: *Spare Equipment, page 9.*)

#### **CRANES AND CRANEWAYS**

The costs of cranes and associated cranesways that are used as an integral part of an operational process and/or to service equipment are included and are assessable as machinery and equipment. The supporting foundations for the cranes and cranesways are considered machinery and equipment.

The costs of cranes and cranesways that are not assessable as machinery and equipment, for example to load the finished product, are included and are assessable as structures.

## EXCLUDED COSTS

### PRE-CONSTRUCTION AND POST-CONSTRUCTION COSTS

The distinctions between construction costs and project costs representing pre-construction and post-construction activities are somewhat arbitrary. It may be necessary for the assessor to meet with company representatives to determine the status of specific costs and to understand accepted industrial policies and practices.

### PRE-CONSTRUCTION ACTIVITIES

#### FEASIBILITY STUDIES

The costs associated with studies that evaluate the viability of a proposed project are excluded. The costs of feasibility studies must be reported separately from the costs for developing working models to facilitate construction or staff training which are included. (See also: *Consulting Fees*, page 5, and *Working Models*, page 5.)

#### CANCELLATION CHARGES

The payments made to a contractor for cancellation of a project before any construction is performed are excluded.

### POST-CONSTRUCTION ACTIVITIES

#### COMMISSIONING, PRE-PRODUCTION RUNS, AND START-UP

These activities occur after the physical completion of construction or when contractual standards have been met in order for the facility to be turned over to the company. Costs associated with these activities are excluded. (See also: *Testing*, page 6, and *Design Changes*, etc., page 9.)

**Note:** *The cost of equipment installed during commissioning, pre-production, and start-up runs are included.*

*Commissioning:* The analysis and verification of operational processing or manufacturing systems.

*Pre-production run:* Pre-operational run of the process that allows for adjustments, revisions, etc., to produce the product to specification.

*Start-up:* A run that produces an on-specification product at design quantities within the warranty provisions.

### PROPERTY THAT CANNOT BE ASSESSED

In Alberta, assessments are based on the value of property as defined in the *Municipal Government Act*. The value of other types of property such as personal property, are excluded. The definitions of property, improvement, structure, and machinery and equipment are set out in legislation.

### ROYALTIES, LICENSES, AND PATENT FEES

The payments made for the right to use particular processes are excluded.

### MOBILE EQUIPMENT

The costs of mobile equipment are excluded. (See also: *Cranes and Craneways*, page 7.)

### CONSUMABLE MATERIALS

The costs of chemicals and catalysts consumed as part of an industrial process, and during commissioning, pre-production, and start-up, are excluded.

#### **SPARE EQUIPMENT**

The cost of machinery and equipment stored on site, but not designated as standby equipment, is excluded. (See also: *Standby Equipment*, page 7.)

#### **PROPERTY EXEMPT FROM ASSESSMENT**

The *Municipal Government Act*, in section 298 (1), specifically excludes certain property from assessment, even though it fits within the statutory definitions in the Act. For example, the Act excludes a portion of a water conveyance in a manufacturing or processing plant (clause (g)), and provides a similar exclusion for sewage conveyance systems (clause (h)).

#### **DESIGN CHANGES, ALTERATIONS, AND MODIFICATIONS**

Costs incurred during construction to make alterations that improve the operational efficiency of the original plant design are not assessable. Likewise, the costs of “de-bottlenecking” or modifying an operating process are not included as long as there are no changes to the equipment inventory.

The cost of equipment installed to improve operational efficiency is included.

#### **INTERFERENCE COSTS**

Additional costs incurred for reasons of safety while working in close proximity to existing facilities for example, the cost of pilings to ensure the structural integrity of existing buildings, the rerouting of piping, electrical lines, or telecommunications lines, are excluded.

#### **GOODS AND SERVICES TAX (GST)**

The GST paid on construction materials and services is excluded. The GST paid by the owner is credited against tax collected by the owner from the sale of plant products and need not be recovered in the price of the product itself.

#### **IMPORT DUTY AND BROKER FEES**

The duty and fees levied on an imported component that increase its cost above the cost of a comparable component made in Canada, are excluded.

#### **BONUS OR PENALTY**

Payments made to a contractor for completion of a project prior to a stipulated deadline, for example are excluded. Similarly, the amount of a financial penalty imposed on the contractor for failing to meet a condition in the contract may not be deducted.

#### **COMPUTER COSTS**

The computer costs, hardware and software, not required to operate the facility but necessary to support the business activities carried on at the facility, for example accounting and personnel are excluded. (See also: *Included Computer Costs*, page 7.)

#### **ABNORMAL COSTS OF CONSTRUCTION**

If the actual costs of an industrial facility are greater than typical construction costs, then the excess construction costs of the facility are considered abnormal and are excluded.

Additional costs incurred because of unproductive labour are excluded.

Abnormal costs can result from delays in construction caused by natural disasters or inclement weather. Abnormal costs may also occur when the construction workforce is on site, but a lack of supplies or a work slowdown reduces or stops actual construction.

Specific documentation is required to substantiate claims for abnormal costs.

The determination of what constitutes “typical” or “normal” is difficult; it is subjective and it may vary over time, from one location to another and among industries. In an attempt to reduce uncertainty and produce assessment consistency for regulated properties, a number of assumptions are made when describing normal conditions for the construction of regulated property:

- an adequate labour force is readily available at the worksite
- raw materials and pre-fabricated component parts are readily available
- projects are financed from operations or from shareholder equity and companies make no provision for interest during construction, and
- premium payments are not made for overtime worked.

**TRAVEL COSTS**

The costs of paying staff for time spent travelling to and from the worksite are excluded. The costs to supply transportation for the workforce to and from the site are excluded.

**TRANSPORTATION COSTS**

The costs of transporting raw material and components from the Edmonton area to the work site are excluded. However, if the actual transportation costs from the point of origin to the plant site are equal to or less than the cost would be to the Edmonton area, the entire transportation costs are included. (See also: *Freight Charges*, page 6.)

**INTEREST DURING CONSTRUCTION**

The cost of interest on money to finance the construction of a project is excluded.

**OVERTIME**

The premium portion of wages and fringe benefits paid for overtime for work performed is excluded. For example, where time and a half is paid, the time portion is included and the half portion is excluded.

**PROPERTY TAXES**

The property and business taxes paid on the facility are excluded.



## GLOSSARY

<b>Term</b>	<b>Definition</b>
<b>Company</b>	The assessed person as described in the <i>Municipal Government Act</i> , RSA 2000 c M-26, section 304.
<b>Company representative</b>	A person authorized by the company, in writing, to provide information that will be used for the purposes of preparing an assessment.
<b>Contractor</b>	The person or firm designated by the contract as responsible for the overall construction of the facility.
<b>Cost</b>	Generally used in appraisal to mean the expenditures, direct and indirect [overhead], of constructing an improvement. <i>International Association of Assessing Officers (IAAO), Glossary for Property Appraisal and Assessment, page 34.</i>
<b>Edmonton area</b>	The City of Edmonton and the surrounding area within 50 kilometres of the city limits.
<b>Excluded cost</b>	A cost that is excluded from the determination of assessable cost.
<b>Improvement</b>	As defined in the <i>Municipal Government Act</i> , RSA 2000 c M-26, section 284(1)(j).
<b>Included cost</b>	A cost that is included in the determination of assessable cost.
<b>Machinery and equipment</b>	As defined in the <i>Matters Relating to Assessment and Taxation Regulation, Alberta Regulation 220/2004</i> , section 2 (b).
<b>Minister's Guidelines</b>	A document setting out the prescribed procedure for preparation of assessment that is authorized by the <i>Municipal Government Act</i> , RSA 2000 c M-26, section 289 and section 293 and provided for in the <i>Matters Relating to Assessment and Taxation Regulation, Alberta Regulation 220/2004</i> .
<b>Overhead cost</b>	A cost that is not directly traceable to any given unit of output. Sometimes referred to as "indirect cost". It is impossible to draw a sharp line of demarcation between overhead and direct costs, and any classification of costs into these two groups is necessarily somewhat arbitrary. <i>IAAO Glossary for Property Appraisal and Assessment, (page 35).</i>
<b>Property</b>	As defined in the <i>Municipal Government Act</i> , RSA 2000 c M-26, section 284 (1) (r).
<b>Structure</b>	As defined in the <i>Municipal Government Act</i> , RSA 2000 c M-26, section 284 (1) (u).

## REFERENCE

- Municipal Government Act, RSA 2000 c M-26, section 284 (1) (j).*
- Municipal Government Act, RSA 2000 c M-26, section 284 (1) ( r).*
- Municipal Government Act, RSA 2000 c M-26, section 284 (1) (u).*
- Municipal Government Act, RSA 2000 c M-26, section 289.*
- Municipal Government Act, RSA 2000 c M-26, section 293.*
- Municipal Government Act, RSA 2000 c M-26, section 294.*
- Municipal Government Act, RSA 2000 c M-26, section 295 (4).*
- Municipal Government Act, RSA 2000 c M-26, section 296.*
- Municipal Government Act, RSA 2000 c M-26, section 298 (1).*
- Municipal Government Act, RSA 2000 c M-26, section 299-301.1.*
- Municipal Government Act, RSA 2000 c M-26, section 304.*
- Matters Relating to Assessment and Taxation Regulation, Alberta Regulation 220/2004.*
- Glossary for Property Appraisal and Assessment, International Association of Assessing Officers (IAAO), page 34 & page 35.*
- Copyright ©1997 by the International Association of Assessing Officers.



# **INTERPRETIVE GUIDE TO THE 2005 CONSTRUCTION COST REPORTING GUIDE**

**ISBN 978-0-7785-7157-5 (Print)**

**ISBN 978-0-7785-7158-2 (Online)**