

A GUIDE TO THE PROFESSIONAL SERVICES YOU REQUIRE

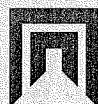
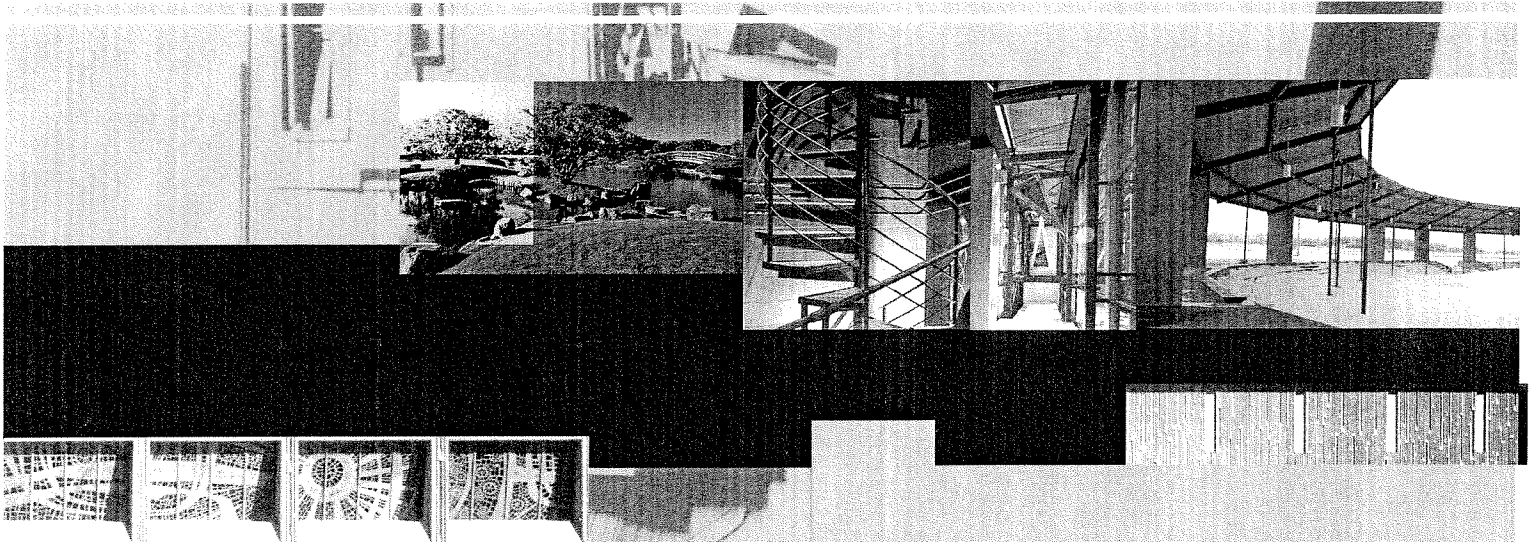
# Ensuring the success of your building project

Arrange for professional services

Select a prime consultant

Determine what professional services are needed

Determine the consulting fee



The Alberta  
Association of  
Architects



**APEGGA**  
The Association of  
Professional Engineers, Geologists  
and Geophysicists of Alberta



## Designing a clear course for building projects

### This guide is a starting point to help you understand how to:

Arrange for professional services  
for your building project.

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Select a prime consultant to  
coordinate work on the project.

#### Page 5

Determine what professional  
services are needed.

#### Page 8

Determine the consulting fee.

#### Page 11

Understand the factors affecting  
consulting fees.

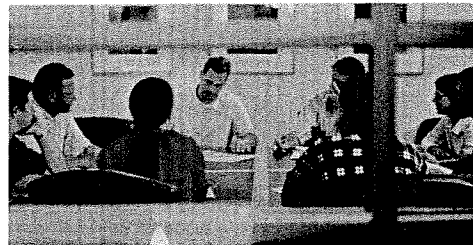
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This guide also provides an introduction to a set of key tools that enable the client who initiates a building project and the design professionals involved to put together a clear and solid working relationship. That kind of relationship is a key to the success of a building project. During the planning, design and construction of the building, the design professionals involved become major participants in the client's organization, serving as advisors, coordinators, designers and technical managers.

The tools that can help to build this essential working relationship are contained in a comprehensive publication called *Recommended Conditions of Engagement & Schedule of Professional Fees for Building Projects (the Fee Schedule)*. That detailed document outlines all the steps involved in a typical building project. Its checklists enable the client and professionals to map out a clear project path and establish the services required and fees involved. This guide serves as an introduction to that publication.

The product of two years of work, it is the first-ever joint initiative of its kind in Canada. Please see that document—or contact the AAA or APEGGA—for further information on any of the topics discussed in this short guide.

Recommended Conditions of Engagement & Schedule of Professional Fees for Building Projects (the Fee Schedule) is an initiative of the Joint Board of Practice together with the Alberta Association of Architects (AAA) and the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA). It is endorsed by The Consulting Engineers of Alberta (CEA).



## Where do you begin in arranging for professional services?

### No two building projects are alike

Understand first that every client starts from a different place. Most have broadly defined the size and function of the proposed structure or facility. Some have already worked out a more detailed approach. Some want a project similar to others they have built in the past with perhaps only a few modifications. Most already own the building site; a few may need help finding a suitable location.

### The prime consultant

Wherever you start, you will need professional help. You will need a prime consultant who will work with you to determine what professional services are required for your project—and then head up the design team that will provide these services.

The prime consultant may be either a registered architect or professional engineer, depending on the nature of the project.

Registered architects are usually prime consultants on buildings involving human habitation. Professional engineers are usually prime consultants for industrial projects, warehouses or other structures where habitation is not an issue. Licensed interior designers may be prime consultants on appropriate projects.

The prime consultant then works with the client to define the scope of services needed and to bring in the other members of the design team. These are usually mechanical, electrical and structural engineers and other specialist consultants as necessary. The prime consultant is responsible for the overall management and coordination of this team.

## How do you select a prime consultant?

### Getting the best value for your investment

Selecting the right prime consultant for your project takes time. It is time well spent because of the months or perhaps even years you may spend working together on the project and the substantial capital investment required. Contact AAA or APEGGA to obtain documents to guide you through the process of selecting a prime consultant.

### Letter of interest

Clients often begin the selection process by asking a number of registered architects and/or professional engineers for a letter of interest. The Alberta Association of Architects (AAA) and the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA) can provide a list of firms with experience in the type of work required. Alternatively, you may place an advertisement in local newspapers with a brief outline of the nature and scope of the project.

### Informal approach

Another approach is to contact firms that you have worked with in the past, firms recommended to you by others, or firms that have handled projects similar to yours. If the project is relatively small or so specific that it calls for a particular firm, you may wish to save time and energy by going directly to a registered architect or professional engineer who comes highly recommended.

### Request for proposals (RFP)

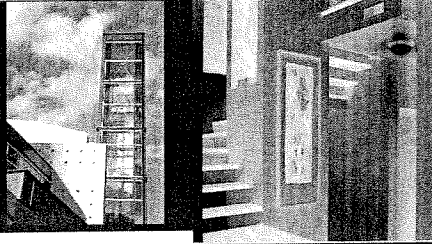
Unless you have selected a prime consultant directly, your next step would be to review letters of interest received and develop a short list. Firms on the short list could then be asked to respond to an RFP. (The RFP process is standard on most projects involving public funds to ensure that the public interest is protected.) The RFP should be designed to enable the client to select the prime consultant on the basis of:

- Professional capability.
- Experience.
- Suitability for the particular project.
- Ability to provide the required services within the fee guidelines outlined in this guide.
- Availability.



## How do you select a prime consultant?

continued...



### Getting best value with quality-based selection

Quality-based selection (QBS) is a well-established system for selecting a prime consultant based on professional qualifications and competence. QBS uses predetermined, value-based criteria to compare two or more potential candidates based on criteria such as:

- Experience in providing similar required services.
- Overall history and reputation.
- Familiarity with local geography, facilities and professional consultants.
- Management experience and skills.
- Project methodology.
- Technical competence.
- Commitment to the client's interests.

### Finding the right fit

The interview with the leading candidates chosen on the basis of their RFPs or any other selection process is crucial. It gives you a chance to determine whether you feel comfortable with an individual and his or her firm as well as to follow up your prior evaluation of their experience, technical expertise, judgement and other factors. Each individual and firm may have its own style and approach to problem solving, project management and various other aspects of a building project. It is important for you to select someone you can easily communicate with and who understands your approach and needs.

### Agreement on services and fees

After the competing firms have been scored based on their RFP response and personal interview, the client then notifies the top-ranked firm. The client meets with that firm to seek agreement on the scope of services and professional fees based on the published *Fee Schedule*. If agreement can't be reached with the top-ranked firm, negotiations then begin with the second-ranked firm. Contact the AAA, APEGGA or CEA for documents to guide you through the selection process.

### Avoiding the pitfalls of competitive price bidding

Hiring a prime consultant for a building project is not the same as purchasing a commodity or basic service. You can usually set out your exact specifications for the commodity or basic service and buy it in a competitive bidding process from the supplier who offers you the lowest price. You have eliminated any unknowns.

Building projects, on the other hand, are highly complex, multi-faceted activities with many unknowns at the start. Part of the job of the prime consultant you hire is to address these unknowns using all its creative, technical and management skills. For that reason, it's often impossible at the beginning of a project for the client or prime consultant to fully determine the extent of the job ahead and the time involved.

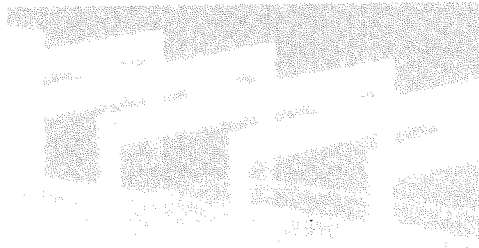
### The bottom line

The best way to select a prime consultant is based on its ability to provide the required services at a professional standard of quality. Registered architects and professional engineers are willing to compete on these terms. This can be more helpful to you than selection based on competitive price bidding.

If you select based on price, the prime consultant could end up with insufficient funds to fully examine the best solutions. Your overall costs could increase as a result. Insufficient fees may result in insufficient service to the detriment of your project.

You need to spend an appropriate amount for professional services so the prime consultant can provide the required scope of services. The scope of services must meet the requirements of the governing codes and regulations to protect public safety.

The prime consultant also needs sufficient time to instill value at each phase of the project and to keep construction costs and costs over the life cycle of the building as low as possible. The bottom line: you get what you pay for.



# What services should you expect?



## The scope of services

Owners need to work with the prime consultant to identify what professional services are needed for the project. Part of this process is to identify what role you will play as client.

Be aware that the scope of services defined for the prime consultant must reflect the prime consultant's duty both to satisfy the expectations of the client and to protect public safety. The prime consultant has a legal obligation to protect public safety.

### The scope of services should therefore ensure that:

- The design meets the requirements of the governing codes and regulations.
- The scope of services for the whole project team is adequate and based on the defined needs of the client. The *Fee Schedule* provides a convenient means of ensuring this. Section 3.1. of the *Fee Schedule* lists the scope of work that a client can expect on a typical project. These services then become the basis for the contract between the client and the prime consultant.
- Subconsultants are responsible for the design and review of all aspects of the projects within their discipline.

## The role of subconsultants

Depending on who is selected as the prime consultant, the subconsultants may include:

- Registered architects
- Structural engineers
- Mechanical engineers
- Electrical engineers
- Municipal engineers
- Civil engineers
- Licensed interior designers
- Landscape architects
- Other specialist consultants as required

The prime consultant normally hires subconsultants on behalf of the client. (The work of structural, mechanical, electrical and municipal engineers is usually included within architectural fees.) The client sometimes hires these subconsultants directly and uses the prime consultant to coordinate their services. Such arrangements should be discussed in detail with the prime consultant. It is important for the success of your project that the prime consultant—who is uniquely trained and experienced in this regard—be responsible for the overall management of subconsultants throughout the project.

**IMPORTANT** | For the client, a reduction in fees in conjunction with a reduction in the basic minimum services provided, can jeopardize the successful completion of the project. For the registered architect or professional engineer involved, failure to provide basic minimum services in accordance with the Architects Act and the Engineering, Geological and Geophysical Professions Act and Code of Ethics is considered a breach of professional standards. It can lead to disciplinary action for the professionals involved and affect the issuing of required building and occupancy permits, and compliance certificates.

## Basic services

Most projects need a set of basic services provided by registered architects and professional engineers. These include:

- Pre-design work.
- Schematic design.
- Design development.
- Construction documents.
- Bidding or negotiations.
- Construction and post-construction contract administration.

These services are described in the *Fee Schedule*. Basic minimum services are guaranteed in the publication's schedule of recommended minimum fees.

## Additional services or special consultant services

Requirements for building projects vary widely and may require additional professional services. These could include everything from legal surveys of existing facilities to economic feasibility studies to zoning applications to geotechnical analysis, among many others.



## As designed and on budget

*Construction contract administration is an integral part of the services provided by the prime consultant. After taking all the steps to make sure your building is designed the way you want, you need to ensure that it is built as designed, conforms to building codes, and remains on budget.*

*The prime consultant, in consultation with the other members of the design team, will observe the construction for its compliance with drawings and specifications. The prime consultant will also review the results of construction tests and inspections, evaluate contractor requests for payment, handle requests for design changes during construction and administer the start-up, completion and close-out process.*

## What services should you expect?

continued...

### How to define additional services

You can work out an appropriate complement of services from the listings in the *Fee Schedule*. Use these listings as a discussion guide to help you and the prime consultant define all necessary service options. The information enables you to define these services and accurately adjust the consultant fees to reflect any additional duties.

### Professional review of construction

The client is responsible for ensuring that there is appropriate professional involvement during the construction. A registered architect or professional engineer must review the construction to make sure that it follows the design intent of the contract documents. (This is an important duty of the prime consultant and is a major reason why a prime consultant is needed for a building project.)

Municipalities will not issue a building or occupancy permit if a professional was not involved with the project during construction. These rules, established to protect the public, require that a registered architect or professional engineer assume professional responsibility for certain categories of buildings defined under the Architects Act, the Alberta Building Code and the Engineering, Geological and Geophysical Professions Act.

## How do you determine appropriate consulting fees?

### A logical step

If you've followed the *Fee Schedule* it will be relatively straightforward to work with the prime consultant to determine consulting fees. Fees will be based on the tables and other tools in the document describing project categories, basic minimum services, potential additional services and special consultants' services that may be required for the phases of a typical project. These services then become the basis for the contract between the client and the prime consultant.

### Reaching common ground

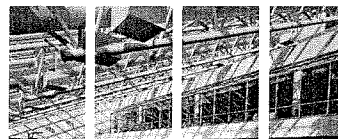
Although there may still be some negotiation, you and the prime consultant should now be of common mind on the key issues of project scope, services, responsibilities, schedule and construction budget. This enables you to apply the standard and well-tested forms of agreement presented in the *Fee Schedule*. The schedule provides a means of establishing the relationship between the client and the prime contractor right from the beginning of a project, even in the face of some unknowns. Contracts to formalize an arrangement are available from the AAA and APEGGA.

### Types of fees

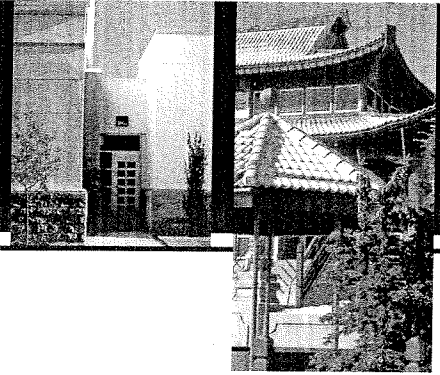
The *Fee Schedule* outlines the three most commonly used methods of determining fees. They include a percentage-based fee related to the cost of construction, and a fixed fee that can be used when the number of hours required can be fully defined. An hourly rate is usually paid for complex work that can't be fully defined at the outset. The document shows how to apply these fees to the types of services being provided.

### Expenses

The prime consultant should also be reimbursed for all reasonable expenses. The value of these expenses should be discussed and agreed to when the client/prime consultant agreement is being defined.



# What factors affect fees?



## Cost of construction

The percentage-based formula establishes the fee as a percentage of the cost of construction. The cost is determined by the contract prices of all elements of the project. The total may, of course, be revised as specific project information is determined.

## Building categories

The actual percentage applied to the construction cost is determined by the category of building. Categories range from relatively simple projects such as warehouses (Category 1) to extremely complex projects such as community multi-use centres or city halls (Category 5). Categories, recommended percentages and project variables are listed in the *Fee Schedule*.

## Project variables

Project variables, if there are any, are added to the basic percentage fee. Variables are factors not normally associated with a typical project in its category. These variables require a higher level of service by the design team.

The *Fee Schedule* sets out normal conditions, scale factors and variables for various project functions. For example, under the heading of Site and Context, "normal" is defined as a relatively uncomplicated site with compatible land use. One variable would be a steeply sloping site that requires additional work. A scale factor (usually 0 to a maximum of 5.0) is negotiated for each variable depending on its severity. Additional professional costs as a percentage of the total construction cost are then determined based on a table of project variables.

## Small projects

For small projects, a standard percentage fee calculation would not reflect the amount of work required of the prime consultant. Therefore fees for projects up to \$300,000 are usually negotiated at a higher percentage of the cost of the work than for projects over that amount.

## Repeat work

Services for repeat work for the same client using the same design and documents are usually negotiated for a fee between 50% and 100% of potential full-service charges. The repeat fee covers basic services, a royalty of 25% of the potential full service charges for use of the original design, a minimum of changes and presentation of construction estimates, among other duties. The *Fee Schedule* provides further details.

## Allocation of project fees

Fees for basic services are typically allocated as follows:

- |                                   |       |
|-----------------------------------|-------|
| • Pre-design and schematic design | 12.5% |
| • Design development              | 12.5% |
| • Construction documents          | 50%   |
| • Bidding/negotiation             | 5%    |
| • Construction/post construction  | 20%   |

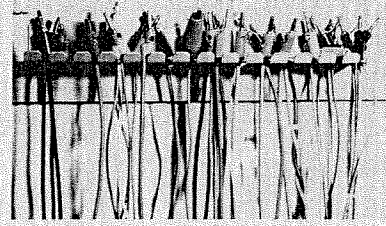
## Payment schedule

The client and prime consultant should agree on the terms and schedule of payments when defining their agreement.

## Ownership of construction documents

The client normally has ownership of the actual drawings and related construction documents, unless the agreement with the prime consultant specifies otherwise. However, the architect or professional engineer involved normally retains the "copyright," unless the agreement stipulates otherwise. The copyright can be defined as the idea embodied in the drawings and the right to reproduce that idea. The *Fee Schedule* provides further details.





## For more information

For more information on professional services for your building project, consult *Recommended Conditions of Engagement and Schedule of Professional Fees for Building Projects (the Fee Schedule)*. This document is produced jointly by the Alberta Association of Architects (AAA) and the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA). It is endorsed and supported by The Consulting Engineers of Alberta (CEA).

AAA and APEGGA also have additional documents on selecting a registered architect or professional engineer and other information concerning building projects.

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#### Front Cover

Panini A Vini, Edmonton, Alberta Architect: The Cohos Evamy Partners Architects Engineers Interior Designers, Edmonton/Calgary  
Secret Theatre Expansion, Calgary Centre for Performing Arts, Calgary, Alberta Architect: Mark William Chambers Architect  
Abour Faw-Wow Ground, Ermmeskin Cultural Park, Hobbema, Alberta Architect: Francis Ng Architect Ltd.  
Francis Winspear Centre for Music, Edmonton Architect: The Cohos Evamy Partners Architecture Engineering Interior Design  
Thesis Project - School of Dance  
Student: Ingrid Adamcik (Student, University of Calgary)  
St. Luke's Catholic Church Architect: The Cohos Evamy Partners Architects Engineers Interior Designers, Edmonton/Calgary

#### Pages 2 and 3

Western Headworks Canal, Calgary to Chestermere, Alberta Architect: Simpson Roberts Architecture Interior Design Inc.  
Doll Block Facade Restoration, Stephen Avenue Mall, Calgary, Alberta Architect: Simpson Roberts Architecture Interior Design Inc.  
Mission Bridge Brewing Company, Calgary Architect: Richard Lindseth Architecture Inc.  
Thesis Project - School of Dance  
Student: Ingrid Adamcik (Student, University of Calgary)

#### Pages 4 and 5

Francis Winspear Centre for Music, Edmonton Architect: The Cohos Evamy Partners Architecture Engineering Interior Design  
Frost Residence, Edmonton Architect: Terry Frost Designer Architect Ltd.  
Boys and Girls Club of Edmonton Architect: Stantec Architecture Ltd., Edmonton  
Doll Block Facade Restoration, Stephen Avenue Mall, Calgary, Alberta Architect: Simpson Roberts Architecture Interior Design Inc.  
Thesis Project - School of Dance  
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#### Pages 6 and 7

Thesis Project - School of Dance  
Architect: Ingrid Adamcik (Student, University of Calgary)  
The Rozsa Centre, A Facility for Fine Art and Centre for International Understanding, University of Calgary Architect: CFV Group Architects & Engineers Ltd.  
Buddhist Temple Architect: Hasegawa Pond, Engineers Architects  
W.P. Wagner High School Architect: Manase Isaac Architects Ltd.

#### Back Cover

St. Luke's Catholic Church, Calgary Architect: The Cohos Evamy Partners Architects Engineers Interior Designers  
Sally Borden Building, Banff, Alberta Architect: The Cohos Evamy Partners Architects Engineers Interior Designers  
The Rozsa Centre, A Facility for Fine Art and Centre for International Understanding, University of Calgary Architect: CFV Group Architects & Engineers Ltd.