STAFF REPORT
SUBMITTED BY: Chris Frotten
DATE: May 19, 2020
SUBJECT: Revision of Architect Fees for the Design of the Recreation Centre

ORIGIN

The architects are requesting additional fees for the completion of the tender and construction documents for the Recreation Centre project that are outside of the CAO's approval authority.

BACKGROUND

In May 2018, Council began the process of developing a design for the replacement of the existing Recreation Centre on Sherose Island (Resolution C180504). In July 2018, SNMArchitect Limited were selected (Resolution C180612) to help develop the design and prepare the contract documents for the project.

Since that time, Staff and Council have been working with the architects on finalizing a design which was approved on April 26 (Resolution C210406).

COMMENTS/OBSERVATIONS

Increased Fees

The fee submitted in 2018 was based on a project of a defined size, cost and project timeline. The scope, size, complexity and resourcing required for this project has changed for their design teams.

Therefore, they are requesting additional fees, as the terms have changed, and they cannot complete the tasks required in 2021 for the fee set out in the 2018 contract.

In their industry, design fees are typically percentage based on construction value. For reference, I have attached a national fee guide which recommends a budget of 8.8 – 11.98 % for Architecture and basic Engineering fees for a project. The estimate for our project at this time is 5% up to Construction Drawings and 4% for Construction Administration.

Net-Zero Project

As will be explained further in the second item on the agenda, the project could attract substantial federal funding through the Green and Inclusive Community Buildings Program (https://www.infrastructure.gc.ca/gicb-bcvi/index-eng.html). The construction of new community buildings, such as recreational facilties, is eligible under the GICB program in cases where construction will fill a missing, or distinct gap in a service requirement of high needs communities where critical community infrastructure is lacking.

New construction projects are required to be built to be net-zero carbon or be built to be net-zero-carbon-ready. Due to the attractiveness of this funding program, we owe it to incorporate this in our project but we will require the architects' and their engineers' assistance. The preliminary design stage is an appropriate time to add these building choices and it should not create dramatic changes. They are very familiar with the Program and have offered to assist us in whatever we need in your application.

Alternative

Council could opt to reject the increased fees but would then be forced to seek another firm to complete the tender and construction documents or substantially renovate the existing building. This would evidently delay the project and the use of a new facility further which poses a challenge to us as the current building is beyond repair and maintenance.

BUDGET IMPLICATIONS

The original tendered fee was $129,900. Due to a few change orders relating to our approach and additional design work, the fee increased to $153,400. Their revised fee for tender and construction documents for the project is $235,000.00. This represents an increase of approximately $80,000.

If Council chose to approve this increase, it would be incorporated in the final project cost which would be covered by a combination of grants and reserves/financing.

LEGAL IMPLICATIONS

N/A

PUBLIC CONSULTATION/COMMUNICATIONS

N/A

RECOMMENDATION

We are approaching the finish line on this project and although the additional fees are not pleasant, they are justified as we have made a number of additional requests and changed the scope and timeline of the project. A project of this nature is complex and expensive, and every option should be considered from

every angle. We have done more than our due diligence on this project and although it took longer than planned, it results in a better outcome.

Another point to consider is that we hope to fund 70-80% of this project through grants therefore the increase cost to our taxpayers only represents about approximately $16,000-$24,000.

The option to do nothing is not available due to the condition of the use and condition of the building. For all of these reasons, I recommend approving the increase of fees to complete the tender and construction documents for this project.

SUGGESTED MOTION

N/A

ATTACHMENTS

1. SNMArchitect's Original Proposal
2. The Royal Architectural Institute of Canada's Guide to Determining Appropriate Fees for the Services of an Architect

MoDB1806

PROPOSAL

DESIGN OF REPLACEMENT RECREATION BUILDING

MUNICIPALITY OF THE DISTRICT OF BARRINGTON

SNMArchitect Limited

Date: June 19, 2018

Contents

Introduction & Thank you

Mr. Rob Frost, Chief Administrative Officer
Municipality of the District of Barrington (MoDB)
PO Box 100
2447 Hwy 3
Barrington, NS
B0W 1E0

June 19, 2018

Re: **MoDB1806 "RFP – Design of Replacement Recreation Building"**

Dear: Mr Frost,

SNMA has brought together an exceptional team of professionals, all with outstanding experience, knowledge and track records in the field of municipal design and the community site design in Nova Scotia. We understand the varied recreational service needed in municipalities today.

The team assembled herein has been strategically selected for Municipality of the District of Barrington (MoDB), brought together by a mutual passion to develop innovative maintainable solutions that effectively and affordably meet the needs of today. The Architects at SNMA have maintained a strong working relationship in the municipal design community in Nova Scotia. Our entire team have worked together for decades and have a clear understanding of the strengths that each member brings to a project.

We have reviewed Addendum #1 and made adjustments accordingly.

The Municipality of the District of Barrington has not worked with the Principal Architects of SNMA recently and we would value an opportunity to demonstrate our full potential in the successful delivery of a new sustainable community centre for the MoDB. We understand the challenges and desires of the MoDB and their aspirations for the future learning environment and can manage and deliver the project to your complete satisfaction.

Thank you,

Stephanie Nowe-Morris, NSAA LEED AP
of SNMArchitect Limited
snma
SNMArchitect Ltd. 27 DeWolfe Court, Bedford, N.S, B4A 3N7.
Cell: 902-221-0238
Fax: 902-832-6878
Email: stephanienm@snma.ca

1. Consulting Team and References

A. Firm Description/Structure & Size:

SNMArchitect Limited (SNMA)
27 DeWolfe Court
Bedford, N.S. B4A 3N7
phone: 902-221-0238
fax: 902-832-6878

SNMA has been in operation since **2005** with two (2) registered architects having over 60 years' experience and required support staff to deliver your project successfully. We facilitate a collaborative design process with stakeholders and are committed to delivering the highest quality service and product throughout the course of the project.

SNMArchitect Limited (SNMA) has most recently been very active in providing design and construction administration services as prime consultant to several institutional clients including,

- Nova Scotia Department of Transportation and Infrastructure Renewal
- Public Works Government Services Canada/Parks Canada/RCMP
- Halifax Regional Municipality and
- Strait Regional School Board

Figure 1 – Renovation of Dr. J. H. Gillis School, Antigonish

PRINCIPALS/ DESIGNATION / YEARS OF EXPERIENCE

Stephanie Nowe-Morris, President, LEED AP, NSAA, AANB *(Full CV in Appendix 'A')*

A professional Architect committed to creating innovative solutions that create positive environments. She has a solid track record of delivering projects of all sizes, working with for PWGSC, HRM, DTIR and other Facility Management Departments, while being a caring and passionate facility and project manager.

With over 27 years of experience, Stephanie has significant experience in all aspects of building design services, marketing, project management, co-ordination between engineers and technologists and other members of the design team; preparation of specifications, equipment selection, contract administration and site inspections.

Ted Mitchell, Senior Architect, NSAA *(Full CV in Appendix 'A')*

Ted is an experienced architect with a unique perspective after 20 years' experience in Facility Management for the City of Halifax and over 20 years' in the practice of architecture. During 20 years as City Architect for Halifax, Ted implemented numerous recreational building projects of the nature called for in this document. His most recent experiences in recreational facilities include the full field soccer facility in HRM for Soccer Nova Scotia and a four-pad curling facility for Berwick, NS. Ted is a formative facilitator of quality projects, with a client focused delivery style.

Relevant Experience

• Kings Mutual Centre – Addition & renovations	Berwick, NS	2016-17
• Alderney Gate Library – Refresh	Dartmouth NS	2018
• Dr. J.H. Gillis High School Revitalization	Antigonish NS	2018
• Strait Area Education Centre Renovation	Port Hawkesbury, NS	2015-16
• Soccer Nova Scotia, Indoor Multi-Field Complex	Halifax, NS	
• Halifax Ferry Terminal – Refurbishment	Halifax, NS	2017
• Forest Heights School, Energy Upgrade	Chester Basin, NS	2015
• Alderney Gate Customer Service Centre	Dartmouth, NS	2015-17
• City Hall 4th Floor Upgrade and WR Refresh	Halifax, NS	2014-16
• Forest Ridge Academy	Barrington/Port Latour	1999

Figure 2 – Mixed Use Development, Dartmouth

B. Municipal Design experience SNMA

KMCC *(Appledome)* Phase II – Four Pad Curling and Wellness Facility Addition, Berwick, NS

Cost: $4.2 M
Client: Berwick and District Community Association
Contact: John Nichols, Committee Chair, 902-847-5315 jdnichols@bellaliant.net
Consultant Team: Tweedie and Associates, Emtech, RBLI/QSOnline

Kings Mutual Century Center or the *"Appledome"* as it is known locally, currently accommodates the community's Arena, Lions Club, retail space and it has a walking track around the concourse of the arena.

SNMA began working with the local community group in 2014, preparing concept designs and funding applications for a second phase of the project. This phase will incorporate a curling rink, fitness centre, wellness center, community meeting rooms, junior 'A' hockey change rooms and training center along with other related service spaces.

Preliminary design was completed in 2016, and the project was tendered in 2017. The Design Build Tender is currently in progress by Lindsay Construction and is scheduled for completion in September of 2018, in time for the fall curling season.

The SNMA team has been retained by the community group to act as project coordinators on their behalf for the construction period as well as the commissioning of the building and systems. This will ensure that the design objectives, quality of finishes and the building's M&E services and equipment meet the expectations of the client.

Figure 3 - Kings Mutual Centre Addition

Multi-Field Indoor Soccer Complex, Halifax, NS

Cost: $9.0 M
Client: Soccer Nova Scotia
Contact: George Athanasiou, CEO, Soccer NS (now retired)

Consultant Team: As this was a Design-Build contract, Ted was retained by Lindsay construction to provide continuity of process. All sub-consultant work was provided by the contractor team.

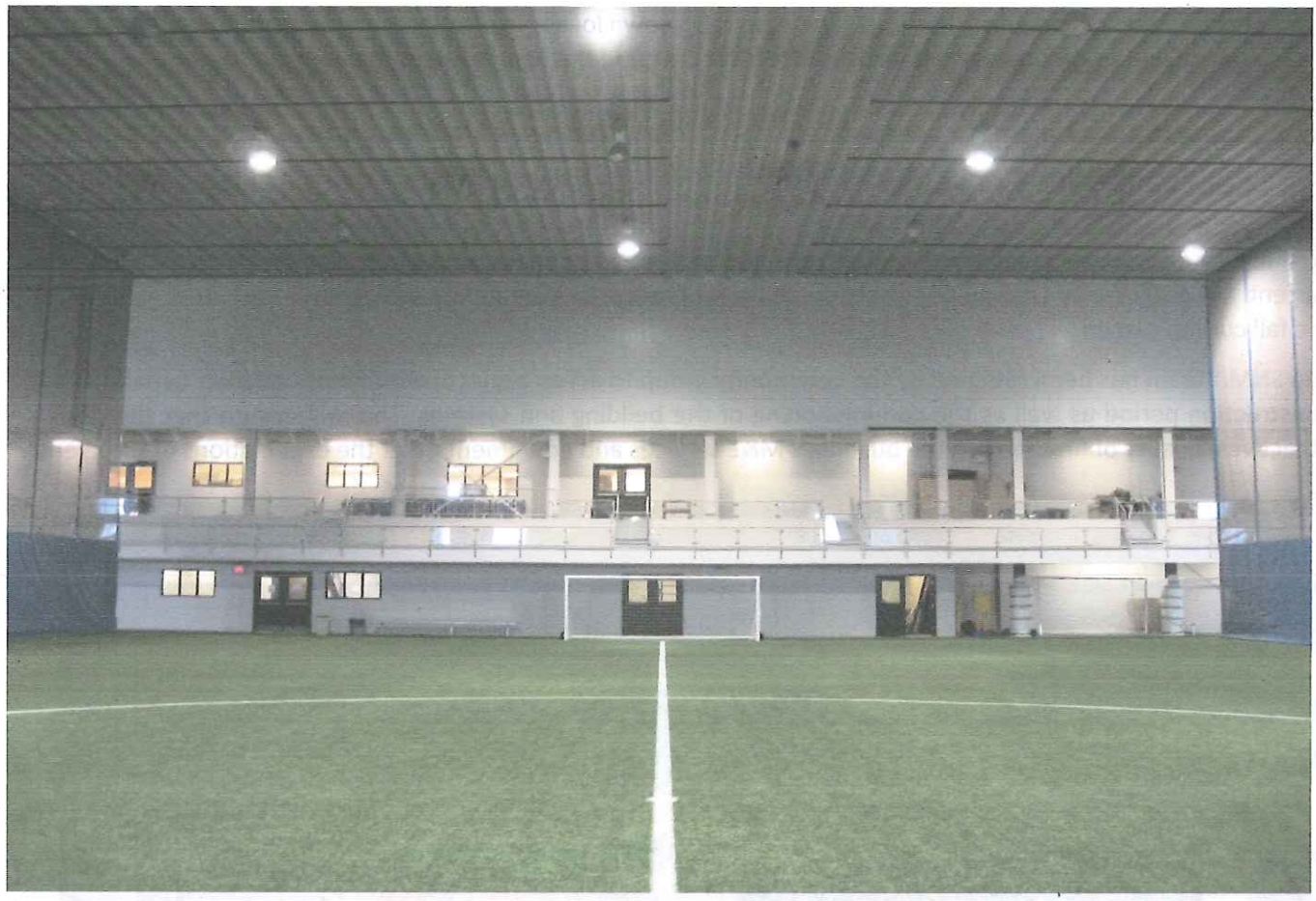


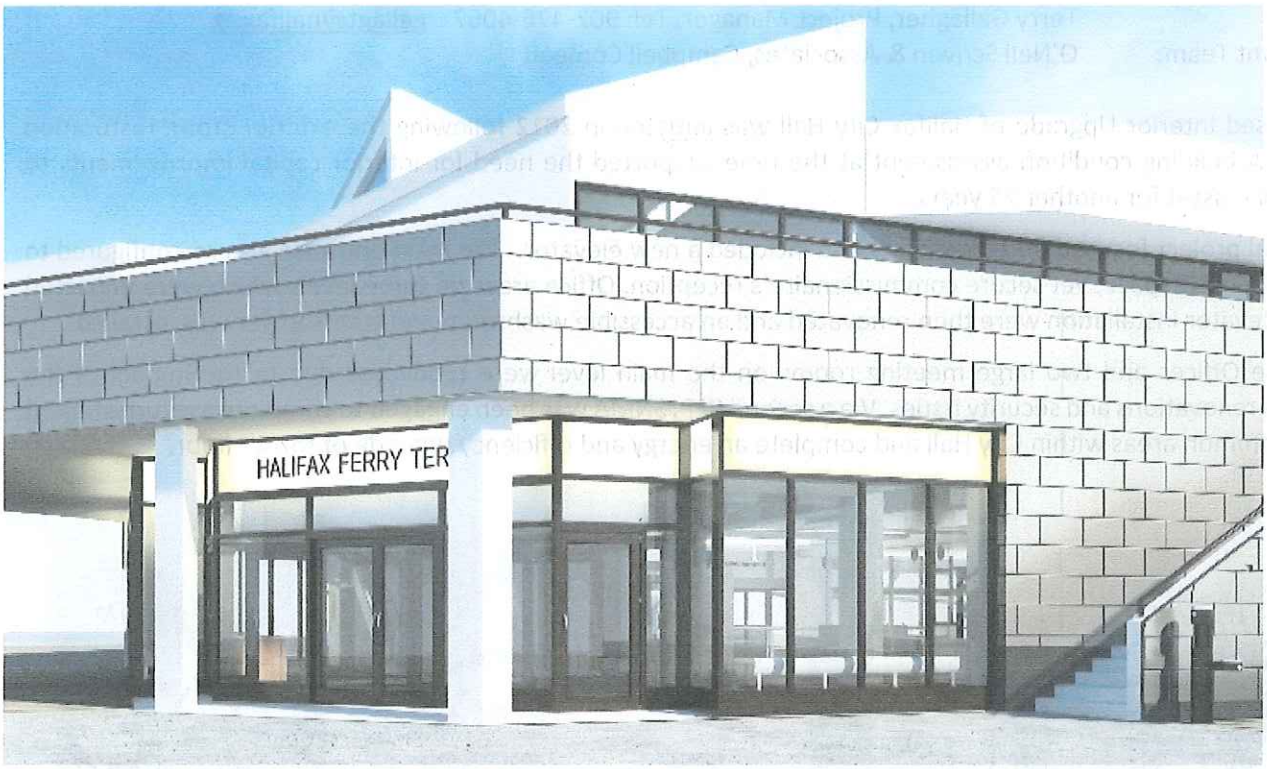
Figure 4 - Kings Mutual Centre Addition

Ted Mitchell was the Construction/Design Manager for Soccer Nova Scotia developing the project from concept to reality. As project Architect, Ted worked with Soccer NS through the funding proposals and presentations to City Council to the administration of construction.

The project included an indoor, full-sized soccer pitch, team support areas, and a 20,000-sf building linking this new facility to the existing building which houses numerous change facilities, a cafeteria and the offices of Soccer Nova Scotia.

Ted navigated the planning approval process and worked with the soccer association to ensure their strict performance guidelines were adhered to while maintain the budget and schedule.

Halifax Ferry Terminal Recapitalization, Halifax, NS



Figures 5 & 6 – Halifax Ferry Terminal Recapitalization

Cost: $800K
Client: Halifax Regional Municipality
Contact: Moira Edmonds, Project Manager, Tel: 902-818-0108 edmondm@halifax.ca
Consultant Team: Smith + Andersen, Campbell Comeau, RBLI / QS Online

The Ferry Terminal Building is undergoing a multi-year phased renovation to modernize its infrastructure and improve staff and user experience. Key services have been upgraded, public and staff washrooms and staff service space is undergoing renovation. The design process to update the ticket kiosk, staff waiting area and the ground floor glazing and entrance systems are currently in progress.

Halifax City Hall Phased Renovation Project, Halifax, NS

Cost: $2.5M Client: Halifax Regional Municipality
Contact: Terry Gallagher, Project Manager, Tel: 902-476-4067 gallagt@halifax.ca
Consultant Team: O'Neil Scriven & Associates, Campbell Comeau

The Phased Interior Upgrade of Halifax City Hall was initiated in 2012 following the exterior stone restoration project. A building condition assessment at the time supported the need for interior capital improvements to sustain the asset for another 25 years.

The initial project focused on accessibility and included a new elevator. The main entrance was re-configured to be a welcoming space, yet secure commissionaire's reception. Office areas on three levels which were impacted by the elevator installation were then renovated and an accessible washroom and staff shower was installed.

Executive Offices and two large meeting rooms on the main level were renovated due to the impact of the previous renovations and security issues. Via a second RFP, SNMA was been engaged to complete a refurbishment of the common areas within City Hall and complete an energy and efficiency upgrade of the 4th floor.

Figures 7 – 4th floor Office Rendering

Figure 8– Corridor Re-fresh Rendering

The 4th floor, was completely renovated and reconfigured for council support functions with refreshed washrooms. The floor contains areas for meetings and promoting business, along with the technical requirements of program staff and administration support for councilors. The restoration of the main stair and corridor refresh as well as a few furniture items will be completed this month.

The phased projects achieved their mandate to improve accessibility, improve the public and professional image of the building, improve washroom facilities, improve security and indoor environmental controls, improve signage and the display of items of significance in the building but ultimately improving work conditions for the staff who work in the building daily.

SNMA played an active role in the project implementation and communication strategy during the project delivery. The project was constantly scrutinized by the elected officials, staff and the public. The contractor's schedules were often impacted without notice due to event occurring in and around the building.

C. Size & Make Up of Consulting Team

List of Consulting firms and their project leaders *(Full CV's in Appendix 'A')*

Project Role	Firm Name	Project Lead
Principle Architect	**SNMA**	Stephanie Nowe-Morris
Senior Architect	**SNMA**	Ted Mitchell
Civil Engineer	**Able Engineering**	Jeff Pinhey
Mechanical Engineer	**Smith + Andersen**	Troy Droesbeck
Electrical Engineer	**Smith + Andersen**	Tyler Hughes
Structural Engineer	**Campbell Comeau**	Michel Comeau
Cost Planner	**Altus Group**	Deanne Bain

D. Consulting Team Details & Municipal Design Experience

ABLE Engineering Services Inc. — Civil Engineering

4 Calkin Drive, Kentville, N.S. B4N 3V7

ABLE Engineering Services Inc., an engineering and land-survey consulting firm based in Chester with an office in Tantallon. ABLE provides civil, municipal and structural engineering services to private and public-sector clients throughout Nova Scotia.

ABLE's design philosophy is simple: to provide clients with attentive service that provides real value. We believe that engineering services should not be simply a key to the door to build, or develop, but should provide logical, informed direction on the best way to build things, considering economic, engineering and environmental criteria.

As a 100% Nova Scotia owned and operated firm of less than 30 people, our clients are all treated as priority customers. Clear communication is critical to our process. That's why any project we undertake begins with a full understanding of the client's requirements, continues with regular contact to discuss developments over the course of the job, and includes follow up to resolve design issues.

Key Individuals: *(Full CV in Appendix 'A')*

Name	Professional designation	Years of experience in the design & building industry
Jeff PInhey **Role:** **Partner Principal, Site Civil Engineer, ABLE Engineering Services Inc.**	P.Eng., M.A.Sc	**29 years** Jeff is a civil/environmental engineer, partner in ABLE and Project Manager. He provides experience in environmental engineering, planning, civil and municipal engineering. Since 1998 he as assessed proposed sites for new schools, justice centers, correctional facilities and some hospitals.
Jay Henman **Role: Civil Design**	Civil Engineering Technologist	**6 years** Jay has worked with SNMA on various projects of this size over the last few years and has a professional delivery approach to site services and boundary survey projects.

Municipal Design experience ABLE

Jeff is very familiar with the Sherose Island site, having previously completed site reviews for DTIR as potential school sites. Jeff continues to work with DTIR on capital site projects around the province. Currently, ABLE is working to site a new school in Bedford, and SNMA is working with HRM to site a new library in Bedford. SNMA and ABLE's collaborative approach has grown from their early career work finding sites for schools like Forest Heights or the Barrington Port LaTour community in 1998.

Other Relevant Experience

- Gordon Snow Community Center & Fire Station 45
- Cole Harbour Place, Dartmouth
- Yarmouth Mariner Centre
- Port Hawkesbury Civic Centre
- Port Hawkesbury Justice Centre
- The Tower SMU
- CFB Stadacona, New CPO and Officers Mess (Juno Building)
- New Coast Guard Headquarters, Dartmouth, NS
- NSCC Marconi Campus, New Automobile/Trades Training Centre
- CFAD Bedford - Missile Storage Facilities
- DND Windsor Park Proposed Arena, Owner Engineer
- Bishops Landing Surface Drainage Review
- Dalhousie Life Sciences Centre, Drainage Improvements
- New Atlantic Cat Sales and Service Centre, Burnside
- Miller Composting Facility, Burnside
- CBU New Track and Field Facility
- Halifax Independent School
- Shannex Clayton Park - Fairfax,Expansion
- Saint Mary's Stadium Field Turf Drainage and Grading
- The Halifax Grand Parade Renovation
- HRM Burnside Soccer and Football Synthetic Fields
- Maplewood Apartments Site Renovation
- Northwood Continuing Care Facility, Bedford
- Alderwood Seniors Care Facility, Baddeck
- Inverary Manor Seniors Care Facility, Inverness

Figure 9 - Gordon Snow Community Centre by ABLE

Smith + Anderson
1969 Upper Water Street, Suite 1905, Halifax, N.S. B3J 3R7

Mechanical and Electrical Engineering

Figure 10 – Warden Community Center

HISTORY

Founded in 1965, Smith + Andersen's early focus was in the field of mechanical building systems. Initially based in Toronto, S+A grew significantly in 1976-77 with the opening of branch offices in Calgary and Ottawa. Further expansion included the creation of an electrical division (1997), integration of a full-service communications services and project management division (1999), and the establishment of offices in Edmonton (2009), Vancouver (2009), Kelowna (2009), London (2012), Winnipeg (2014) and Halifax (2016). With sustainability increasingly forming a critical component of all company projects, we created our sister firm Footprint in 2011. S+A now offers a range of sustainability services, from site planning and energy modelling through to the facilitation of a LEED certification process.

PHILOSOPHY

The Smith + Andersen Group's design philosophy is simple: to provide our clients with a space that is safe, comfortable, ecologically sound, and fully complementary to the interior design and architecture of the structure. We are proud to have been selected as the mechanical and electrical engineers for projects across Canada. Clear communication is critical to our process. That's why any project we undertake begins with a full understanding of the client's requirements, then continues with regular contact to discuss developments over the course of the job. Our strict principles kick in right from the outset, so clients benefit from our vast experience in selecting systems, preparing budgets, developing preliminary designs, coordinating with architects, and controlling the system costs and project schedule.

S+A's mechanical designs are focused on providing creative solutions to meet our client's priorities. The mechanical system needs to provide thermal comfort and maintain good indoor air quality. It can be as much about acoustics as it is about filtrations or outdoor air ventilation. Mechanical systems are one of the largest energy consumers in the built environment. We recognize our obligation to encourage responsible design because even relatively small improvements in design can result in large long-term life cycle saving for our clients. Sustainability is important to us. We have a proven record of executing projects successfully with energy efficient HVAC designs, practical plumbing, essential fire protection and complex building automation systems.

The Smith + Andersen Electrical Group's design philosophy is simple: to provide our clients with a space that is safe, comfortable, ecologically sound, and fully complementary to the interior, architecture and structure.

Electrical systems, from high voltage power to low voltage lighting controls, emergency power generators to alarm systems, are a critical element in maintaining and supporting the demands put on our buildings every day. Electrical systems need to be flexible and adaptable to allow our infrastructure to evolve and adapt with the changing needs of the users. S+A uses their broad experience of project types and project sizes to ensure that each electrical system is designed appropriately for each situation.

CAPACITY

The Smith + Andersen Group has registered professional engineers (127 total*) across Canada. Additionally, 132 staff members are certified with the Canadian Green Building Association as either LEED Green Associates or LEED Accredited Professionals.

Every Smith + Andersen team practices clear communication on all projects. By maintaining consistent lines of communication and clearly mapping out responsibilities, timelines and goals through the life cycle of a project, we make certain that the process is as dependable as the final deliverable.

Our trusted team includes more than 500 trusted professionals. The following is a breakdown of our current staff resources by specialty:

SUSTAINABILITY	31 Engineers / Project Managers
SHARED RESOURCES	24 Administration
	39 Shared Services
MECHANICAL	117 Engineers / Project Managers
	157 Designers / Contract Administrators / CAD and BIM Technicians
ELECTRICAL	52 Engineers / Project Managers
	101 Designers / Contract Administrators / CAD and BIM Technicians
SYSTEMS	16 Engineers / Project Managers
	13 Designers / Contract Administrators / CAD and BIM Technicians

Municipal Design experience S+A

Smith + Andersen has completed the mechanical and electrical design of a vast number of the sports and recreation facilities across Canada. With this experience comes a thorough understanding of the design challenges these types of facilities typically face due to the varied functions they can house and the flexibility such diverse programming demands.

The modern arena must be designed for efficient year-round operation and maintain a healthy environment for participants and spectators alike; providing high levels of outside ventilation air while controlling indoor humidity levels during the demanding spring/summer season is critical to avoid fog, condensation, mildew, odours, and rust. Gymnasia require system flexibility as their use can range from court games (such as basketball and volleyball) to social affairs or meetings.

Smith + Andersen's electrical distribution design is always functional and reliable. We understand that lighting affects an athletes' performance and determines the spectators' experience during an event, so this key design aspect is paramount to a successful sports facility. Our designs are based on the latest requirements of the Illuminating Engineering Society (IES) and are provided with occupancy sensors, daylight sensors, low voltage relays and switches to provide automatic and/or manual control of the lighting.

Smith + Andersen's telecommunications and building automation service is on the leading edge of emerging technologies in today's business world. We take pride in leading our clients through the sometimes-overwhelming world of technology by assessing their needs to generate systems designs that will address their needs from day one and throughout the lifespan of the facility in a cost-effective manner. We are dedicated to providing truly innovative, customized and modular/integrated solutions for our projects.

LONDON SOUTH WEST COMMUNITY CENTRE, LONDON ONTARIO **Figure 11**

Gross floor area	15,500 sm (166,840 sf)
Total construction cost	confidential
Completion year	2018

The new two-storey London South West Community Centre contains a YMCA and a shared facility with the City of London. The YMCA features an athletic centre, aerobics rooms, youth centre, gymnasium, aquatics centre with teaching pool and a 25m lap pool, change rooms, and a community centre. The City of London facility includes twin ice pads, change rooms, multipurpose rooms, and an indoor running track. Part of the building also houses the London Library.

Energy recovery heat pipes are used on the arena and pool change rooms. A pool dehumidification unit is installed that reclaims and transfers compressor heat to the pool water or supply air. Heat is recovered from the arena refrigeration system to provide heating in other parts of the building and preheat the incoming domestic water. The plumbing system uses water-saving fixtures such as dual flush water closets, low flow urinals and lavatories. Most air handling units monitor the space's carbon dioxide levels to reduce energy and improve the indoor air quality. Other building air-handling units employ variable air volume terminals for temperature control, flexibility and energy efficiency.

The electrical distribution system was conceptualized to have dedicated branches for each individual tenant and the common house loads. A simple distributed lighting control system, utilizing occupancy sensors, daylight sensors and dimming control integration, is implemented throughout the building. LED lighting sources are exclusively used on the project, taking advantage of the unique properties and lighting distribution of LED luminaires to inventively illuminate multi-storey and interconnected floor spaces. To meet code regulated energy efficiency requirements, the building was approached using the prescriptive path, which surpassed energy efficiency requirements by 60%.

The telecommunications infrastructure design supports the back of house, wireless, access control, CCTV, audio visual, and building automation system (BAS) controls for all program areas. Category 6 horizontal cabling infrastructure is utilized for network connectivity. Multimode fibre optic backbone cabling is included in the design to support each network. The security design services for the London Southwest Community Centre includes security systems throughout the facility which consists of IP (Internet Protocol) based video surveillance and intrusion detection systems. The facility serves three separate clients; therefore, the intrusion detection system is configured to allow each client to fully control and monitor the arming and disarming of their intrusion system on the various areas and levels within the facility. A public-address speaker system for the rink supports various program uses including public skating, figure skating and hockey. The aquatic centre features a speaker system with wireless microphones to allow instructors to conduct aqua fit classes. Various meeting rooms also feature audio and visual presentation systems with integrated control for ease of use.

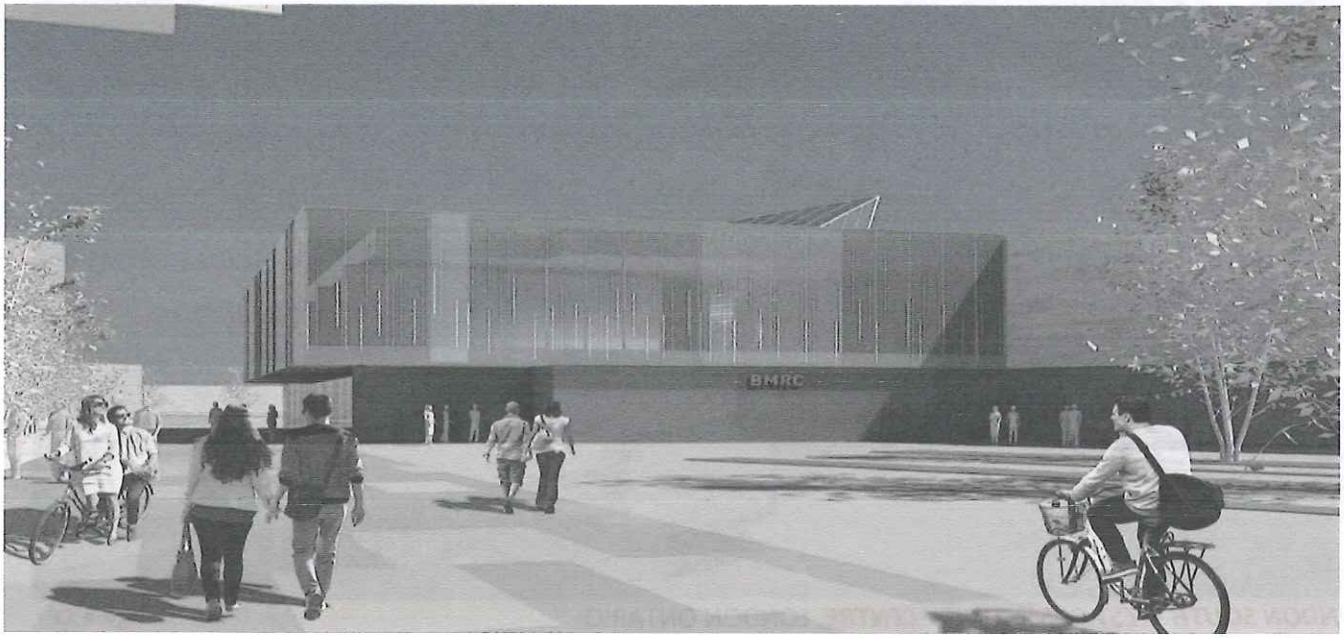


Figure 12

BERNIE MORELLI RECREATION CENTRE, HAMILTON, ONTARIO

Gross floor area 5,099 sm (54,895 sf)
Total construction cost confidential
Completion year 2018

Located south of the new Tim Hortons Stadium, the new Bernie Morelli Recreation Centre (BMRC) will be one of the final pieces of the Hamilton Pan Am Precinct vision and will serve the local community and recreational needs of the surrounding residential neighborhoods. The building program features active program spaces; dance studios, walking track, gymnasium, and leisure pool as well as open public community rooms for the local residents' and seniors'. The Bernie Morelli Recreation Centre will also connect the existing Jimmy Thompson Pool building through a two-storey public lobby space spanning the south side of the BMRC building.

The natatorium will have a dehumidification ventilation system that recovers heat back to the pool (make-up heat provided from the building's central heating boiler). The pool change rooms will have high exhaust rates and 100% make-up air, so the air handling unit will be supplied with a heat pipe energy recovery loop. The other units serving the large gymnasium and fitness areas shall be variable air volume (VAV) and will include low level return air for increased circulation and odor control. Plumbing fixtures are all low flow for potable water conservation and showers include mechanical spring timers to shut off the water supply when not in use. Both kitchens shall incorporate National Fire Protection Association (NFPA) exhaust hoods with a dedicated make-up air unit.

A new electrical service is brought in from Horizon Utilities and will also serve the existing Jimmy Thompson pool as well. The life safety emergency power is supplied through an inverter system located in the main electrical room. The fire alarm system is an addressable single stage system which has a communication link to the existing Jimmy Thompson Pool fire alarm system as the two buildings share a 2-storey link.

To minimize energy usage, all the lighting in the building are energy efficient LEDs and have programmable dimmable low voltage relay lighting controls. The exterior luminaires are dark sky compliant and full-cut off. In the public areas, the luminaires are integrated with the architectural wood, tech-style tiles and drywall ceilings. The security design services include the complete design of state-of-the-art turnkey security systems which consist of IP (Internet Protocol) based video surveillance, electronic card access control, intrusion detection and duress alarm systems throughout the facility. The utilization of a fully IP based security system design allows for implementation and integration of all security systems on a high speed redundant fiber optic backbone for connectivity. This results in highly reliable systems; critical to the safety and security of the staff and visitors at the facility

Figure 13

MOSS PARK REVITALIZATION, TORONTO, ONTARIO

Gross floor area44,480 sm (482,650 sf)

The City of Toronto and local community agency, the 519, have proposed a revitalization to the Moss Park area to construct a new community centre. It is intended to replace the aging John Innes Community Centre and Moss Park Arena, while retaining and incorporating the existing amenities. The project has significant importance to the 519 agency, as well as the LGBTQ communities, and aims to provide a cohesive and accessible space for Moss Park residents and visitors.

Designed by MJMA + West 8, the three-storey facility will be approximately 157,650 square feet and will include approximately 325,000 square feet of outdoor space. The centre will provide various sports and recreation spaces, community, social, support and service spaces, as well as outdoor amenities.

Recreation spaces include a gymnasium, gym/cardio room, ice pad, swimming pool, and two running tracks, one which is located on the mezzanine level and provides views to the main lobby. In addition, the building will offer a restaurant, community kitchen, sports bar, café, community meeting rooms, and spectator areas. Sustainability is a key factor in the building's design and is expected to adhere to Toronto Green Standard Tier 2, provide a 50% green roof, incorporate energy-efficient measures, and meet net-zero energy targets.

Figure 14 - Hyde Park School, Barrie by S+A - awarded the most energy efficient school in North America

BROOKLIN COMMUNITY CENTRE AND LIBRARY, BROOKLIN, ONTARIO

Figure 15

Gross floor area	3,720 sm (39,998 sf)
Total construction cost	$10,400,000
Completion year	2011

The Brooklin Community Centre and Library opened in 2010 and was the newest recreational facility in Brooklin, ON. In addition to a branch library, the two storey building features a pre-school program, youth centre, gymnasium, and spaces dedicated for meetings, crafts, as well as a multi-use banquet room. The community centre also offers various educational and recreational programs.

The interior mechanical distribution at the Brooklin Community Centre and Library seamlessly integrates with the architecture. The gymnasium and library spaces have added humidity control to ensure comfortable spaces in these areas as well as proper care for the wood flooring. Mechanical units were strategically located to integrate with the facilities sloped roof, a major distinctive feature of the building.

Figure 16- MLSE Launch Pad

S+A Key Personnel (Full CV's in Appendix 'A')

Troy Droesbeck, *Associate Principal, Mechanical,* P. Eng., 23 years

Troy is a mechanical engineer with 23 years of experience in the commercial, institutional and industrial sectors. His commercial/institutional experience is related to the design of HVAC systems, including boilers, chillers, controls, and fire protection and also includes several projects to upgrade and improve system efficiencies and research functions. Troy's extensive experience includes design and construction administration support for multi-discipline projects and has managed million-dollar projects.

Role:

- be the primary contact at S+A throughout the project
- conduct a detailed mechanical code review and review existing conditions
- attend all project meetings
- consult with team to find efficiencies
- coordinate with mechanical specialist to identify heating, ventilation, plumbing and control systems for current laboratory facilities

Tyler Hughes, *Associate Principal, Electrical,* P.Eng.

Tyler is a critical thinker and problem solver who looks to create cost-effective, efficient electrical and communications design solutions. He engages clients and colleagues in coordination meetings with architectural, mechanical, and structural disciplines on each of his projects, contributing to a shared understanding of the client's project objectives

Role:

- be the primary contact at S+A throughout the project
- conduct a detailed electrical code review and review existing conditions
- attend all project meetings
- coordinate with electrical specialist to identify heating, ventilation, plumbing and control systems for current laboratory facilities

Structural Engineering **Campbell Comeau Engineering Limited**

2719 Gladstone Street, Suite 110, Halifax, N.S. B3K 4W6

Campbell Comeau Engineering Limited has extensive experience with SNMA and has worked on many municipal projects and are currently working with SNMA on renovations at the Halifax Ferry Terminal.

Campbell Comeau specializes in the provision of structural engineering services for all aspects of building construction, restoration, and repair. Above all, we participate in an engaged manner in multi-discipline design teams that produce efficient and economical building structures for our clients.

Structural Key Personnel

Michel Comeau will act as Lead Designer and chief structural engineer for the Project. Michel will function in the role of Project Director. Michel will coordinate the structural requirements with the architect and the other team disciplines. He will oversee and participate in all aspects of the structural design.

Murray Power Senior Document Production Coordinator, providing the key role in the production of the structural drawings. Since 1979 and has been responsible for supervision and coordination in the preparation of design drawings for various structures; detailed cost estimates; site inspection and project coordination.

Municipal Design experience

Truro Civil Center
Lunenburg Lifestyle Centre

Lunenburg County Courthouse, Bridgewater
Yarmouth YMCA

Recent municipal projects with SNMA include:

- Strait Area Education Center, SRSB
- Halifax Ferry Terminal, Halifax Transit, HRM
- Shakespeare by the Sea Theatre Renovations, HRM
- Art Gallery of Nova Scotia renovations, DTIR
- Halifax City Hall Renovations
- Municipal Staff Fit up 3rd Floor Duke Tower for HRM, 2011
- 1st, 4th and 5th Floor Alderney Gate Refurbishment for HRM 2009-10
- Peace Officers Memorial, Parade Square for HRM 2009-11

Altus Group Limited **Cost Consultant**

Altus Group is a leading provider of independent advisory services, software, and data solutions to the global commercial real estate industry. Their business – Altus Analytics and Altus Expert Services – reflect decades of experience, a range of expertise, and technology-enabled capabilities. Their solutions empower clients to analyse, gain market insight and recognize value on their real estate investments.

Established in 1958 and with approximately 145 staff located throughout Canada, Altus Group is the oldest and largest Cost Consulting firm in Canada. They have a solid track record of providing cost planning services on recreational projects.

In accordance with the services as identified in the RFP, they understand that the project is comprised of the preliminary and final design estimates for a new recreation centre with the following design requirements kept in consideration:

- Entrance lobby for users
- Universal Accessibility with the entire building and surroundings
- Advantages and disadvantages of having the replacement building as a stand-alone facility, or connected to the existing Arena Building
- Replacement of the current square footage of the existing building
- Multi-functional use of space for various sized events
- Office space
- Changing rooms/washrooms
- Possible inclusion of kitchen facilities for staff and possible public use.

Cost Control Key Personnel (Full CV in Appendix 'A')

Deanne Bain Deanne brings over 27+ years' experience providing cost consulting services for the public and private infrastructure market. Her expertise spans many market sectors including administrative, entertainment, recreational and educational buildings.

Having lived and worked in Halifax for over 27 years, Deanne understands the importance of being familiar with local building and labor costs as well as budgeting constraints that are often encountered in the Maritimes when helping to provide costing solutions to her clients.

She plays a hands-on-role in the delivery of cost consulting services for her projects and is experienced with developing order of Magnitude, Class C, Class B and Class A estimates including cost plans, cost checks and pre-tender estimates, trade-by-trade breakdowns and building cost comparison studies.

E. Major Municipal Clients & Reference

1) **HRM – Halifax Regional Municipality**
   a. **Terry Gallagher**, Director of Finance & Facilities, Halifax Library previously the Manager of Facility Development for HRM. SNMA have done numerous projects for him and continue to work closely with him in his role at the Library renovating Alderney Gate Library and undergoing a programming and site selection process for a new library in Bedford. Tel: 902-476-4067 gallagt@halifax.ca
   b. **John MacPherson,** Manager Corporate Facility Design and construction at HRM. SNMA has just completed renovations of the HRM Customer Service Center in Alderney Gate and phase two of the Halifax Ferry Terminal project and are in the process of preparing tenders for phase 3. John can be contacted at macphejo@halifax.ca or ph 902-209-0763

2) **NSDTIR – Nova Scotia Department of Transportation and Infrastructure Renewal**
   SNMA have done numerous projects for the provincial government. The managers were Terry Smith-Lamothe and Kim Cooke. Renovations at NS Art Gallery, Province House and many building condition assessments
   a. **Terrence E. Smith-Lamothe** can be contacted at SmithTE@gov.ns.ca Tel: 902-424-6774 and,
   b. **Kim Cooke** can be contacted at Kimberly.Cooke@novascotia.ca

3) **Berwick and District Community Association**
   Working directly for the Association, as client representative, the design-build project is funded thru three level of government. Soon to be complete, the project tightly adheres to the SNMA original concept developed through community consultation in 2014-15. Contact:
   a. **George Moody,** former MLA for the district, gmoody@ns.sympatico.ca ph: 902-679-8044
   b. **Mike Trinacty**, former Department of Health and Wellness manager, mike.Trinacty@gmail.com ph: 902-944-1958

4) **Strait Regional School Board**
   SNMA has completed recreational spaces at the St. Mary's Academy in Sherbrooke, Nova Scotia, and helped re-plan access to the community space in the Strait Area Education Center where the town has its library, theater and other support programs. Contacts for this project and the current renovations at the Dr. J. H. Gillis School in Antigonish are:
   a. **Terry Doyle**, CAO of the Town of Port Hawkesbury. Ph: 902-625-7890. tdoyle@townofph.ca
   b. **Paul Landry**, Director of Operations, SRSB, ph: 902-870-1576 paul.landry@srsb.ca

Figure 17 -Strait Regional School Board Administration Area

2. Methodology and Approach

As outlined below in the breakdown of these stages, the client and stakeholders are inclusive to all stages of the project. The following methodology provides key project review points after and during each stage of the project. Our methodology has been developed and honed over 25 years and has provided the basis for many successful projects in communities like Port Hawkesbury, Berwick, Antigonish and Sherbrooke.

The Request for Proposal document states that the purpose of this exercise is to replace the existing Recreation Building. The current building does not meet code requirements in several areas and its current configuration is not efficient for the types of activities/organizations currently using the facility.

We acknowledge, and noted during a site visit, that the municipality has not finalized the exact location for the building, considering several alternative solutions and locations. SNMA will work with stakeholders to find the ideal location to ensure a successful project.

It would be our suggestion that the exercise to replace the building also provides the municipality with the opportunity to re-assess the entire Sherose Island site and develop a comprehensive re-development plan for the land which could be implemented in phases as funds become available. The location and configuration of the new facility would be the initial step in developing the Sherose Island Property into recreational centre the Municipality of the District of Barrington requires.

This process should precede the development of building plans but can run concurrently with the finalization of a building program for the recreation centre. The schematic site development plan will be developed to move forward concurrently with the design development and tender drawings of the recreation centre.

A. Steps in the Process

Step 1 - Engagement

Through a participatory design process including community stakeholders, local council and municipal program managers and staff, the priorities, the goals and objectives of the project will be confirmed. In a series of 3 proposed workshops in July, August and September, a building program and building location will be established.

Our Civil Engineers will initially work closely with SNMA on the project, consulting with the municipality and stakeholders regarding the site development of the Sherose Island Property. The flow of traffic, accessibility, pedestrian routes, outdoor gathering space for community functions parking and sustainable development principals will be reviewed, and options presented for consideration.

SNMA have undertaken similar consultations in the communities of Berwick and Port Hawkesbury in the last few years, both to confirm and establish recreational programs for their communities. Building programs evolved out of this process that were practical and complimentary to the existing services in these communities. In our school projects, we have consulted in numerous communities around the province, Liverpool, Yarmouth, Bridgewater, Sherbrooke, and River Hebert.

Both Stephanie and Ted are acutely aware of the importance of a participatory design process. In 1999, as a young project architect, Stephanie consulted with the communities of Barrington and Port LaTour to ensure the P3 school planning met the community's requirements. Ted brings the unique perspective of having extensive experience from both sides of the table, having spent 20 years on the municipal side as City Architect and 25 years as a consultant.

Step 2 - Design Development

- Liaise with the client through meeting or initial workshop. Introduction to your personal Design and Management team.
- Assess and survey site constraints, documents and schematic designs.
- Develop the Schematic Design Option D and further develop and define components.

- Develop design drawings, co-ordination of engineering consultant responses to architectural solution; the cost monitoring of designs (Class C); building code review, the preparation of preliminary specification of materials and finishes, prepare preliminary construction programs.
- Continually liaise with client and con-jointly review all planning and design proposals in regard to function, quality and cost.
- Convene, chair and minute Design Team meetings.
- Consultation with Project Manager.
- Preparation of drawings for public display.
- Key Architectural personnel will analyze each element of the proposed building, reviewing construction details, materials, environmental constraints, etc. to produce the optimum building solution.
- Ensure that proper ergonomic parameters are considered and performance analysis of materials to be used are undertaken.
- Engineering consultants will be kept abreast on a day-to-day basis of all developments so that an integrated approach is achieved between services and architecture.
- Necessary negotiations will take place with relevant Authorities to ensure that proposals are in accordance with their respective regulations or requirements.
- Cost Monitoring will be a continual task with close liaison between the Project Design Team and the client.
- The design team always do their utmost to ensure that the client will, by the end of this phase, be fully versed with all aspects of the proposal and be confident that they represent the functional and environmental requirements that have been established for the proper delivery of service.
- Occupational Health and Safety during all stages at design and construction, SNMArchitect is aware of its duties and responsibilities.

Step 3 - Tender Documentation Stage

- Preparation of final working drawings and specifications.
- Preparation Pre-Tender Review Package and Class A Estimates.
- Liaison to finalization of sun-consultant's documentation.
- Apply for and obtain building permit.
- Liaison with procurement & bidders through tender period.
- Review tenderers in conjunction with project manager.

Step 4 – Construction & Contract Administration Stage – (not included in Proposal)

- Review site activity in relation to progress, contraction schedule and timeline.
- Progress claim review and completion certificates.
- Provide Site Instructions, Change Orders required to complete work.
- Attend bi-weekly construction meetings and provide site reports.
- Review shop drawings, samples and submittals.
- Liaison with building surveyor including certificate of occupancy.
- Provide building commissioning and verification.
- Monitor defects prior to substantial completion.
- Review closeout documents and record drawings.
- Provide Warranty services as required.

The SNMA project team is fully engaged, to address changes as they arise, and deliver the required solutions as a project evolves. Our previous successes are attributable to our collaborative caring and compassionate delivery style.

B. Explain how you would plan to produce each of the key deliverables in the study.

1) Comprehensive design(s), and plans prepared to tender for construction contractor

Through authentic consultation and workshops with stakeholders an outline of the building program will be established. By October the project will focus on key deliverables to meet the project schedule.

For two months SNMA will work with a smaller working group to investigate schematic design options for the project until a preferred preliminary design solution is found. SNMA will conduct a Class 'C' Cost Estimate at the end of Preliminary Design for review with the working group.

Important design elements that will need to be considered to meet the needs of the Municipality, and enhance the residents experience and use of facility are:

- Site circulation and parking
- Outdoor gathering spaces for community functions
- Universal Accessibility with the entire building and surroundings
- Entrance lobby for users
- The advantages and disadvantages of having the replacement building as a stand-alone facility, or connected to the existing Arena Building
- Replacement of current square footage of existing building
- Multi-functional use of space for various sized events
- Office space
- Changing rooms/ washrooms
- Possibly kitchen facilities for staff and/or public use

The preliminary design could then be presented to stakeholders and the public in November. The project may require a few updates because of this consultation, but the result will be a submission of a Preliminary Design Package to the Municipality of Barrington for approval.

The Preliminary Project Package will include:

1) Site Plan
2) Building Plans, Section and Elevations
3) Revised Class 'C' Cost Estimate
4) 3D Colored rendering of the Concept

With approval, the SNMA and project team the team would then advance the design through the Design Development Stage in preparation for Tender.

2) Estimated cost of proposed design build

Altus Group Limited will be producing Class 'C' and Class 'A' estimates for the project. The Class 'C' estimate will be provided with the preliminary project package. The class 'A' estimate will be provided with the tender package.

SNMA will attend scheduled design meetings with the consultant team throughout all phases of design and tender documentation production. We develop a deep understanding of the implication of an issue to other disciplines and their impact on project schedules and budget. Circulated weekly team updates include minutes of meetings, major project components requiring attention and details at each phase of the project. Our project team have proven their ability as professionals, team members, innovators and collaborators. Together our collective, pro-active team keeps each other up to date and aware.

Cost Monitoring will be a continual task throughout the design process with close liaison between the Project Design Team and the client. The class 'C' budget will be adjusted internally as details progress and shared with the client at the regular meetings. Design considerations that will have a major impact on the budget will be brought to the client immediately to expedite the decision-making process. The final Class 'A' estimate will include the resulting detailed design costs.

3) *Community consultation that will include a preliminary meeting with citizens, council, and staff, and follow up to discuss proposed design(s).*

Outlined above is SNMA's proposal for an open and inviting engagement process with stakeholders, and a thorough consultation with the municipalities key project members.

SNMA's Integrated Design Team will consult with the MoDB representative to achieve the best design and a complete set of tender documents. Throughout this process the team will present recommendations based on the following:

- aesthetic considerations, functional relationships, code requirements
- Indoor Air Quality & Healthy Building considerations
- Energy Conservation & LEED initiatives
- Schedule & Budget.
- Crime Prevention through Environmental Design

The SNMA Integrated Design Team will deliver a design that aligns with the building program and budget. Initiate a dialogue to review, improve (if required), and create efficiencies that meet the agreed upon requirements whenever possible. SNMA will proceed with options as approved by the municipality.

4) *Recommendations on proposed design and flow of the Sherose Island Property where the building will be located.*

As noted earlier SNMA would like to prepare site development concepts for the Sherose Island Property while the building program is being finalized. A few of the key considerations in the Sherose Island Site plan will be;

- Easy and safe access to and from the site at the intersection of Highway #3
- Control and reduce the pedestrian/vehicular conflicts on the site between the following:
    - Barrington Curling Club
    - Sandy Wickens Memorial Arena
    - Municipal Services on Circle Drive
    - Sports Field
    - Community Centre
    - Beach Access Traffic
- Create opportunities to develop outdoor gathering spaces for additional community functions
- Buffer and soften the impact of the municipal maintenance operations on the site
- Preserve and enhance public access to the beach, forest and seaside, investigate operational stewardship opportunities. Protect, preserve and enhance the community's opportunities to enjoy the natural habitat
- Plan for People & Placemaking
- Create opportunities to develop outdoor gathering spaces for additional community functions
- Create opportunities for further programs and services on the site to enhance year-round uses.
- Plan for and create sustainable places that balance economic, social and environmental sustainability
- Create a plan with financial stability that shareholders will support in multiyear program budgets, enhancing flexibility while maintaining accountability.
- Seek opportunities to improve operational efficiency and reduce costs.
- Cultivate innovation and action, draw inspiration from around the province and the world.
- Demonstrate thru this process transparency and fiscal responsibility.
- INCREASE SOCIAL INCLUSION AND ACCESSIBILITY: Increase accessibility and ensure places we create are inclusive and welcoming for all people

3. Project Work Plan and Schedule

SNMA has reviewed the municipalities schedule and can confirm the following dates are achievable:

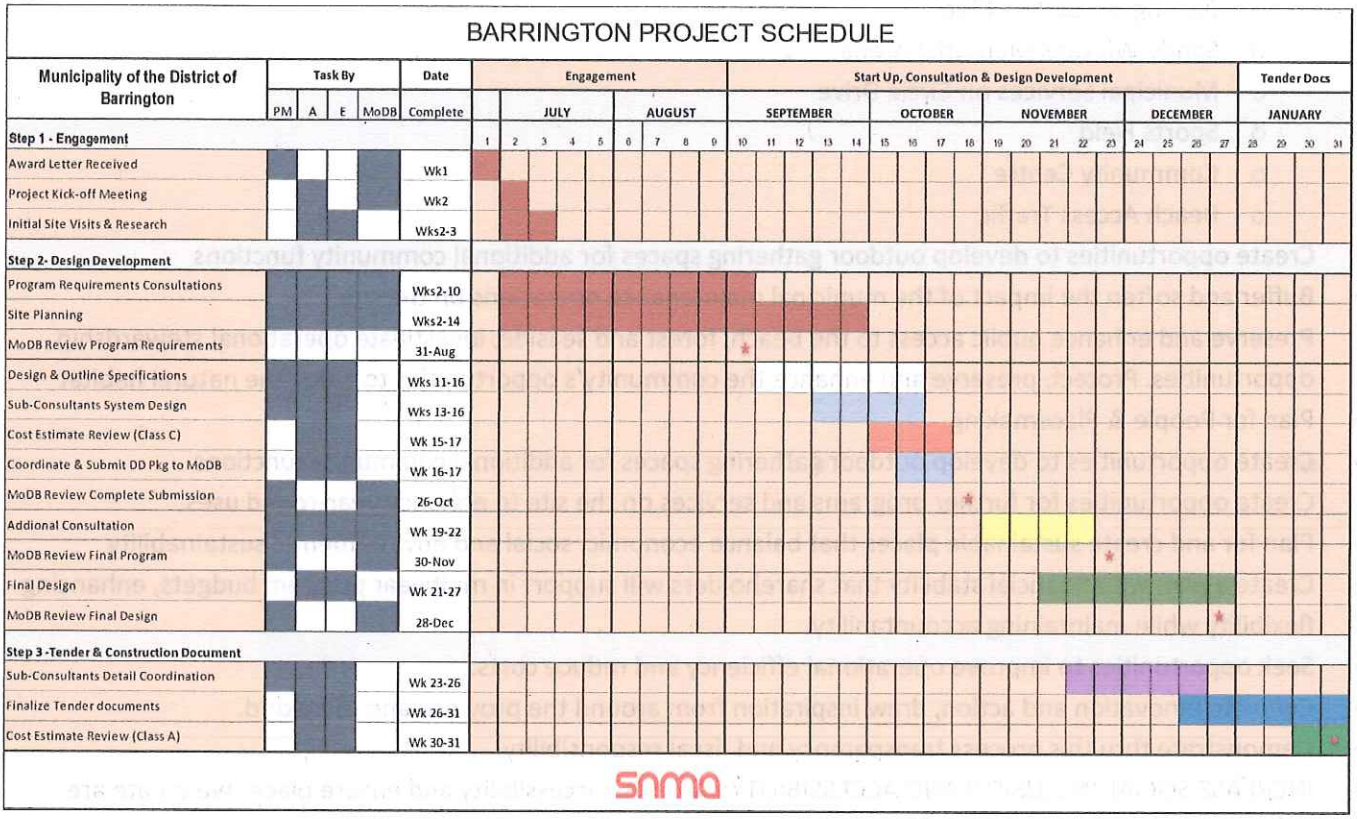
- Closing of RFP – June 19th, 2018
- Project Award – by June 29th, 2018
- Consultation – July to September 2018
- Preliminary Design – October 2018
- Additional consultation – November 2018
- Final Design – December 2018
- Design prepared for tendering January 2019

A. Detailed Plan & Dates

Controlling schedule:

SNMA use schedules to estimate, and communicate milestones and resources needed to reach project goals and objectives Our communication strategy includes a detailed project schedule produced in Microsoft Project, outlining individual's responsibilities, key design and approval milestones and project document delivery dates. This document becomes part of the daily interface for the team, tracking the flow of work, confirming that all parties are working within project expectations.

SNMA use Excel to create a simple summary project schedule to share with client groups and stakeholders from our MS Project Detailed schedule. This birds eye view includes only Milestones and assists external forces in organizing their scope of work without getting lost in the detail.



(Full Size Project Schedule in Appendix 'B')

Schedules will be used to:

- Plan workloads and schedule the production of deliverables.
  Identify percentage complete for tasks and alert appropriate disciplines of slippage and when additional resources will be required or should be added in advance.
  Demonstrate the inter-dependence of each team member and their responsibilities

With our professional management style, our projects benefit from our ability to manage tasks and respond in a timely manner to priorities and critical items.

B. Key Progress Meetings & Calls

We anticipate bi-weekly meetings with the municipalities project management throughout most of the project. These may be held remotely, but most will be locally held meetings.

- Project Kick Off Meeting – week of July 3rd
- Site Visit & Survey - Week of July 10
- Bi-weekly Consultation – July to September to define program requirements and Concept Site Plan.
- Preliminary Design & Cost Review – Week of October 22, 2018
- Design Development Review – week of November 26, 2018
- Final Design Submission Review – week of December 18, 2018
- Tender Package & Class A Costing Review Mtg – week of January 28,2019

C. Work plan

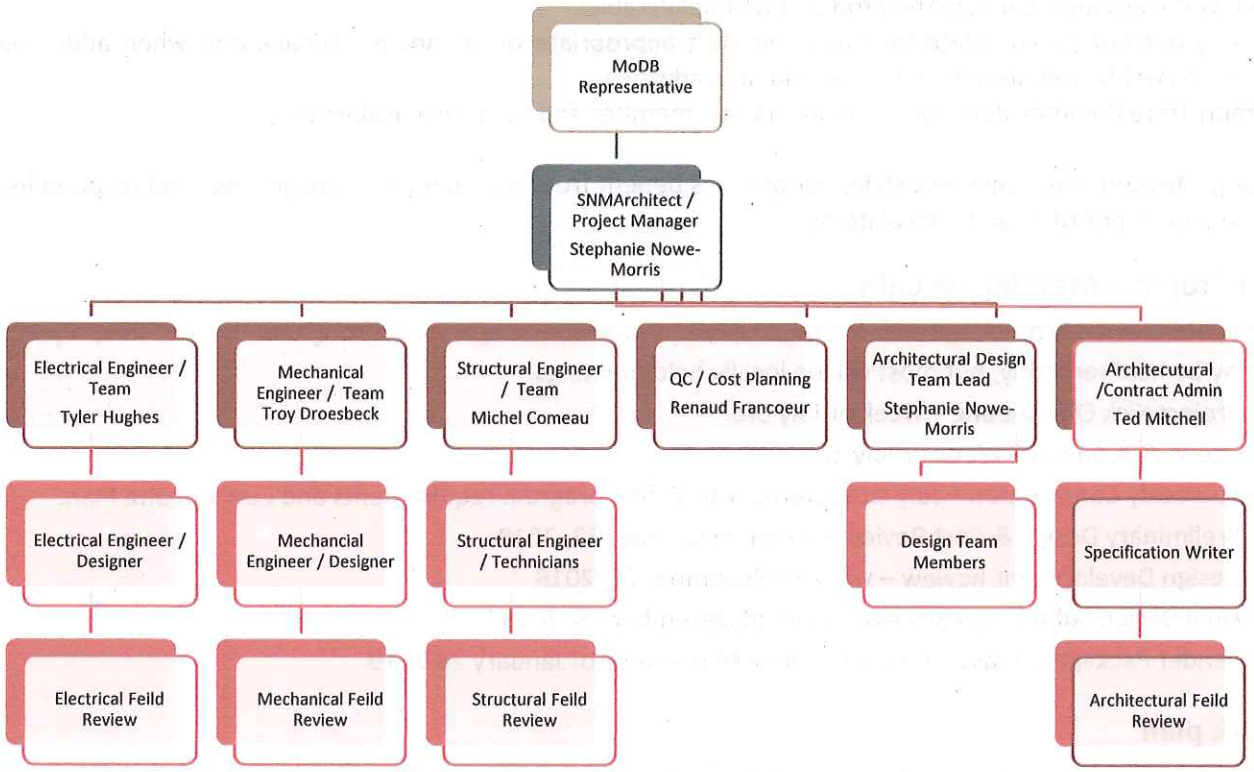
BARRINGTON PROJECT TEAM WORK PLAN

			Architecture		Civil	Structural	Mechanical	Electrical	Cost	
		Duration	SNMA		Able	CCEL	S+A	S+A	Altus	
	Municipality of the District of Barrington		Stephanie Nowe-Morris - PIC	Ted Mitchell - PM	Jeff Pinhey	Michel Comeau - S PEng	Troy Droesbeck	Tyler Hughes	Deanne Bain	TOTAL ACTIVITY HOURS/TASK
A	**Start Up & Site Review**	*2wks*	20	20	5					45
B	**Design Development**	*9 wks*	10	40	20	10	30	20		130
C	**Site Planning**	*13 wks*	80	20	10					110
D	**Review Program Requirements**	*1 wk*	5							5
E	**Design and Outline Specifications**	*7 wks*	10	40		40	35	25		150
F	**Class C Cost Estimates**	*1 wk*	5	5		5	3	3	40	61
G	**MoDB Review**	*1 wk*	5							5
H	**Additional Consultation**	*4 wks*	15	15	5		10	5		50
I	**MoDB Review**	*1wk*	5							5
J	**Final Design**	*7 wks*	60	60		5	15	5	15	160
K	**MoDB Review**	*1 wk*	10	10			5	5	5	35
G	**Tender Documents**	*4 wks*	120	120	10	40	40	30		360
	Total Hours per Team Member		345	330	50	100	138	93	60	**1116**

snma

(Full Size Project Work Plan in Appendix 'B')

Chart illustrating lines of communication for the Project



SNMA's approach and method for managing the consultant team is based on a system of open, regular and complete project communication tools. ***Weekly team updates are circulated to the team, including minutes of individual meetings*** and a project summary of the major project components requiring attention and details at each phase of the project. ***Email is the regular, daily communication tool*** used on most projects. Documents are circulated electronically via e-mail in PDF or other electronic formats.

The project schedule with tender dates and milestones will be updated in consultation with MoDB and used to communicate progress. This document will be attached to design meeting minutes and be continually updated by the Project Architect and distributed to stakeholders.

Value Added Propositions and Recommendations

The SNMA Architect/Project Manager adds value, serves as strategic allies, provides expert knowledge, helps organize facility delivery, merge design and construction processes. SNMA brings knowledge-based experience, speed, and flexibility, compressing time by stepping outside of traditional roles to serve HRM. The goal on this and every project is to provide good design and bring the project in ahead of schedule and under budget, ultimately helping our HRM deliver services efficiently.

We propose a Kick start meeting that is also a Project Implementation Planning Session with stakeholders to establish expectations and establish communication lines. SNMA will review all pertinent documentation with respect to the site and the buildings with a focus on re-confirming the project goals and objectives and avoiding any repeats of past errors.

Our team can provide a variety of architecture, engineering and specialist services that are currently not requested. We would be pleased to provide a formal proposal for any of the following services:

Additional design options and changes to the scope of work at any stages of the project or any changes required by the client after the working drawings are complete..

4. Project Fees

A. Breakdown

This project to design a replacement recreation facility located at 27 Park Lane, Sherose Island, Nova Scotia. The existing facility was built in 1968 and is 6,375 SF. The new design should improve efficiency and durability. The design prepared for tendering is expected January 2019.

The following design requirements will need consideration:

- Universal Accessibility with the entire building and surroundings
- Entrance lobby for users
- The advantages and disadvantages of having the replacement building as a standalone facility, or connected to the existing Arena Building
- Replacement of current square footage of existing building
- Multi-functional use of space for various sized events
- Office space
- Changing rooms/ washrooms
- Possibly kitchen facilities for staff and possible public use
- Outdoor gathering space for community functions
- Site layout, circulation and parking

Figure 18 - Bayview School, Mahone Bay

The Fee is based on the assumption that the project will proceed as a Design-Build contract, with a construction budget of $2,500,000.00.

Construction Administration Services are not included in the fee below.

DETAILED LIST OF TASKS AND ACTIVITIES

Project Program & Site Planning	(12.5%)	$ 17,320.00
Preliminary Design	(12.5%)	$ 17,320.00
Design Development	(20%)	$ 25,980.00
Contract Documents	(55%)	$ 69,280.00
Tender, Contract Administration & Commissioning		$ not included
Total Fees		**$ 129,900.00**

Expenses / Disbursements (Included as noted) *

Total (excluding all taxes) = $ 129,900.00

Figure 19 - HRM Customer Service Centre

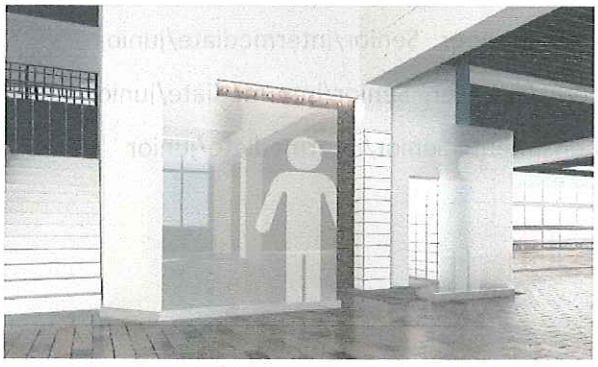


Figure 20 – Halifax Transit Ferry Terminal Washroom Upgrade

B. Special Conditions, Exclusions, etc.

Payment Terms

Payment shall be made to SNMArchitect Limited, invoiced monthly, reflecting services completed to date.

Taxes

All applicable taxes will be charged in addition to The Fee.

Disbursements

Unless otherwise specified, all reasonable expenses incurred will be considered reimbursable and invoiced in addition to the Fee at cost, with a 10% administration fee applied.
These include but are not limited to:

- Printing, plotting, and/or reproduction costs.
- Travel expenses over and above base bid (i.e. meals, parking fees, mileage).
- Courier services.

Additional Services

Additional services would be carried out on an hourly basis, or on a mutually agreed, negotiated price, if scope of work can be established in advance.

SNMA reserves the right to review and modify the above proposed fees if changes to the project scope or deliverables assumed are made during the time after the above fees are submitted for review and approval.

If this contract is cancelled or terminated prior to completion, notwithstanding whether this proposal is based on a fixed fee, you will pay for all work performed to date of cancelation or termination on the basis of hourly rates.

HOURLY RATES FOR ADDITIONAL SERVICES

Various Disciplines/Position	Hourly Charge Rate (plus tax)
Architect. Senior/intermediate/junior	$ 120.00/ 100.00/ 80.00
Code Compliance Consultant. Senior/intermediate/junior	$ 90.00/ 80.00/ 60.00
Interior Designer. Senior/intermediate/junior	$ 90.00/ 80.00/ 60.00
Mechanical Engineer. Senior/intermediate/junior	$ 120.00/ 100.00/ 75.00
Fire Suppression Engineer. Senior/intermediate/junior	$ 100.00/ 90.00/ 80.00
Electrical Engineer. Senior/intermediate/junior	$ 120.00/ 100.00/ 75.00
Structural Engineer. Senior/intermediate/junior	$ 120.00/ 100.00/ 75.00
Cost Consultant. Senior/intermediate/junior	$ 120.00/ 110.00/ 70.00

C. Breakdown by Sub-Consultant or Member

Member	Roles & Responsibilities	Contribution
SNMArchitect Limited	**Project Administration**	$8,200.00
	includes 10 site visits/mtgs	
SNMArchitect Limited	**Architectural Consulting**	$70,550.00
	includes visits/mtgs/document preparation	
ABLE	**Civil Engineering**	$5,500.00
	includes 2 site visits/mtgs/document preparation	
Campbell Comeau	**Structural Engineering**	$11,000.00
	includes 2 site visits/mtgs/document preparation	
ALTUS	**Cost Consultant**	$7,150.00
S+A Mechanical	**Mechanical Engineering**	$16,500.00
	includes 4 site visits/mtgs/document preparation	
S+A Electrical	**Electrical Engineering**	$11,000.00
	includes 4 site visits/mtgs/document preparation	

Figure 27 - Dr. J.H. Gillis - New Reception

APPENDIX A

Member's CV's and Resumes

STEPHANIE NOWE-MORRIS, NSAA, LEED AP

Principal Architect / Project Manager SNMA

PROFILE:

Stephanie is principal and owner of SNMA. She brings three decades of local, regional, and international architecture and construction knowledge, planning implementation, and detailed design experience to each project. Her past work spans the full breadth of scales from master plans to park structures, civic spaces to private offices, and school facility master plans to school ground greening projects.

With a unique background that combines excellent technical rigor and design sophistication, Stephanie injects a strong engineering competency and modern design aesthetic. Her empathetic active listening style strengthens her consultation and management abilities.

EDUCATION & TRAINING

Technical University of Nova Scotia	M Architecture	1990
Technical University of Nova Scotia	B. Envir.Design	1988
Acadia University Computer Science Program, 2 yrs		1985

CONTINUING EDUCATION & SEMINARS

Building for Climate Change	2012
Conference of Edu. Facility Planners	2011
Net Zero Building Envelope Seminar	2010
LEED AP BD+C	2009

PROFESSIONAL EXPERIENCE

2001 - today	**SNMArchitect Limited, Bedford, N.S.**	*Senior Architect, President*
2009 – 2011	Connor Architects & Planners Limited, Dartmouth, N.S.	*Senior Architect*
1996 – 2001	Lydon Lynch Architects Limited, Halifax, N.S.	*Registered Architect*
1991-1996	Core Design Group / Whitman Benn Group Inc., Halifax, N.S.	*Junior Architect*
1990-91	Coles Associates Ltd., Charlottetown, P.E.I.	*Project Architect*
1987-89	Rock Townsend Architects/ Devereau & Partners, London, U.K.	*Architectrural Technician*
1986	Parks Canada, Cornwall, Ontario	*Architecture Student*

PROFESSIONAL ORGANIZATIONS & COMMUNITY INVOLVEMENT

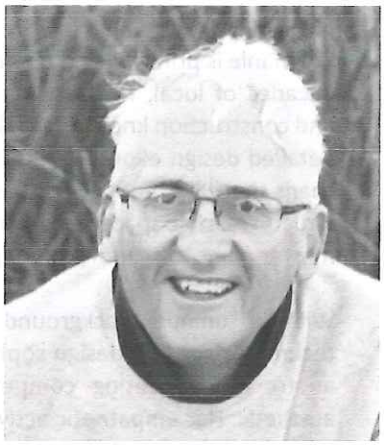
Contraventions of the Act Committee Chair	Nova Scotia Architects Association	2016-8
National Capital Comission, Audit Committee	Ottawa	2016-7
Waterfront Development Corporation	Board of Directors	2014-present
Bedford Waterfront Vison Implimentation Commitee	Halifax Regional Municipality	2008-11

PROJECT EXPERIENCE

Kings Mutual Centre Phase 2, LifeStyle Centre & Curling Center	Berwick NS	2014-18
Sheet Harbour School Adaptive Reuse Risk Assessment	Sheet Harbour	2016
Windsor & Arichat RCMP Detachment Upgrade	Nova Scotia	2016-17
Kejimkujik Washroom & Kiosk Services Review Facilities & Reno	Caledonia NS	2015-16
Queen Manor Assisted Living Facility Program	Liverpool NS	2014
Strait Area Educational Recreational Centre Reno	Port Hawkesbury	2014-16
Halifax City Hall and Parade Square Facility Master Plan	Halifax	2014-15
Strait Regional School Board, Admin & Operations Facility Plan	Port Hawkesbury	2013
DeGarthe Museum, Peggy's Cove Renovation & Planning	Halifax	2012
Wickwire School Facility Plan, Project Lead	Liverpool	2009
Bayview School, Project Architect	Mahone Bay NS	2001
Forest Ridge Academy, Project Architect	Barrington NS	2000
Meadowfields School, Project Architect	Yarmouth NS	1998

C. E. (TED) MITCHELL, NSAA

Senior Architect / Project Manager SNMA



PROFILE:

A registered Architect with over 35 years' experience. Early studies and work experience were in education, commercial developments and military base planning. Mid-career experience was as the City Architect for the City of Halifax (20 years). More recent experience has been as Project Architect for a range of projects from townhouses to large commercial/residential projects.

Ted's experience as City Architect formed the basis for his interest and expertise in project and facilities management.

EDUCATION & TRAINING

Carleton University Bachelor of Architecture

CONTINUING EDUCATION & SEMINARS

The NSAA ensures that Architects continue their studies and learning processes through the regulated Con-Ed process. The latest session attended by Ted was regarding the resolution of conflict during the construction management process.

PROFESSIONAL EXPERIENCE RELATED TO PREFERRED AREA OF PRACTICE

Today	**SNMArchitect Ltd.,** Bedford, N.S.	*Project Architect*
2007 – 2011	Connor Architects & Planners Limited, Dartmouth, N.S.	*Project Architect*
2000 – 2007	United Gulf Developments, Halifax, N.S.	*Director – Design Development*
1996 - 2000	Private Practice, Halifax, N.S.	*Registered Architect*
1978 - 1996	City of Halifax, Halifax, N.S.	*City Architect*

PROJECT EXPERIENCE

Kings Mutual Centre Addition	Berwick NS	2015-17
Renovations at AGNS	Halifax NS	2015-17
Window & Door Assessment – Monument Lefevbre	Memramcook NB	2016-17
NB Border Crossings - Building Condition Assessments	New Brunswick	2017
DTIR Transit Garage Renovations	Antigonish NS	2016
NB Building Condition Assessments – 5 Government Buildings in NB		2016
Strait Area Educational Recreational Centre	Port Hawkesbury	2014-16
Exhibition Park Renovations	Halifax	2014
AGNS Ondaatje Courtyard RE-Roof & Refresh	Halifax	2012/14
Soccer Nova Scotia Training Centre, Mainland Common	Halifax	2012
St. Mary's Academy, Additions & Alternations	Sherbrooke, NS	2012
19 Portland Street, Commercial/Residential	Dartmouth	2013
Mount Hope Multi Unit Residential	Dartmouth	2013

TROY DROESBECK, P. Eng.,

Mechanical Engineer, S+A

PROFILE:

Troy is a mechanical engineer with 23 years of experience in the commercial, institutional, and industrial sectors. His commercial/institutional experience is related to the design of HVAC systems, including boilers, chillers, controls, and fire protection. He also has industrial experience in the oil and gas industry, piping design, district heating systems, industrial ventilation, boiler plants and chiller plants. Troy's diversified project experience includes design and construction administration for multi-discipline projects

Qualifications

Bachelor of Engineering,
Mechanical, University of New
Brunswick, Fredericton, New
Brunswick, 1991

PROFESSIONAL AFFILIATION

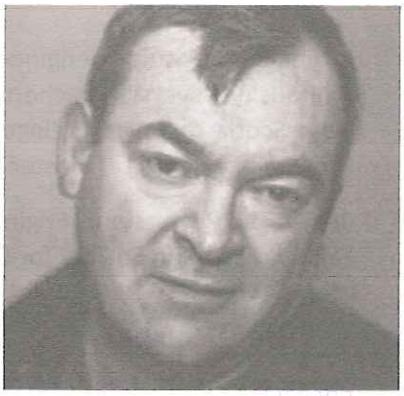
Engineers Nova Scotia Association of Professional
Engineers of Prince Edward Island Association of Professional
Engineers and Geoscientists of New Brunswick
Canadian Healthcare Engineering Society
Consulting Engineers of Nova Scotia - Current Treasurer

Relevant Experience

- PWGSC - Agricultural Research Facility Study, Fredericton, NB
- Correctional Services of Canada office space, tenant fit-up, Kentville, NS,
- CFB Halifax Cape Scott - Tile Shop renovations, Halifax, NS,
- CFB Stadacona boiler plant conversion, Halifax, NS,
- CFB Halifax outdoor fuel oil tank replacements, Halifax, NS,
- CFB 14 Wing Greenwood installation of steam inverted trenches, Greenwood, NS,
- CFB 14 Wing Greenwood - Hangar 10 HVAC upgrade, Greenwood, NS,
- Willow Park DND Second floor office fit up, upgrade offices to workplace 2.0, Halifax, NS,
- Scotia Bank Call Centre space modification and fit up for new training centre, Halifax NS,
- Corrections Services Canada office upgrade and modification, Kentville NS,
- Plaza Building 1881 Brunswick Street upgraded the existing lobby area of the building, Halifax NS
- Garrison Watch Building tenant suite demolish, Halifax, NS,
- RCMP Identification Laboratory building upgrades, Moncton, NB,
- Halifax Regional Police Identification Lab ventilation and room layout Halifax, NS
- Halifax Regional Police Department design upgrades forensic laboratory Halifax, NS

JEFF PHINNEY, P. Eng.,

Civil Engineer, ABLE



PROFILE:

Jeff is a Partner in ABLE Engineering Services. He is a Civil/Environmental Engineer and Project Manager with 25 years of experience in project management and design. He provides experience in environmental engineering and planning, municipal engineering, research and development, geotechnical and materials engineering, urban and landscape design, urban design, and project management.

He has held senior roles in small and medium size engineering and landscape architecture firms, and maintains specialist practices in small scale wastewater solutions, sport and recreation projects, and civil engineering design in support of landscape architectural and planning projects.

Mr Pinhey has provided engineering design services for numerous building sites, ranging from the largest to the smallest. Since 1998, he has been responsible for assessing proposed sites for all Provincially built schools, justice centres, corrections facilities, and most hospitals. He reviews all the site design drawings for that work on behalf of the Province.

Qualifications

1981 B.Eng., Civil Engineering - Technical University of Nova Scotia
1984 M.A. Sc. Water Resources Engineering, Technical University of Nova Scotia

Relevant Experience

- CFB Stadacona, New CPO and Officers Mess (Juno Building)
- New Coast Guard Headquarters, Dartmouth, NS
- NSCC Marconi Campus, New Automobile/Trades Training Centre
- CFAD Bedford - Missile Storage Facilities
- DND Windsor Park Proposed Arena, Owner Engineer
- Bishops Landing Surface Drainage Review
- Dalhousie Life Sciences Centre, Drainage Improvements
- New Atlantic Cat Sales and Service Centre, Burnside
- Miller Composting Facility, Burnside
- CBU New Track and Field Facility
- Halifax Independent School
- Shannex Clayton Park - Fairfax,Expansion
- Saint Mary's Stadium Field Turf Drainage and Grading
- The Halifax Grand Parade Renovation
- HRM Burnside Soccer and Football Synthetic Fields
- Maplewood Apartments Site Renovation
- Northwood Continuing Care Facility, Bedford
- Alderwood Seniors Care Facility, Baddeck
- Inverary Manor Seniors Care Facility, Inverness

DEANNE BAIN, PQS, RICS, CET

Cost Consultant, ALTUS

QUALIFICATIONS

Member, Royal Institute of Charters Surveyors
Member, Canadian Institute of Charters Surveyors
Vice Chair, Canadian Institute of Charters Surveyors, Nova Scotia
Nova Scotia Community College Construction Administration
Technology Graduate, 1989

PROFILE:

Deanne brings over 27+ years' experience providing cost consulting services for the public and private infrastructure market. Her expertise spans many market sectors including administrative, entertainment, recreational and educational buildings.

Having lived and worked in Halifax for over 27 years, Deanne understands the importance of being familiar with local building and labor costs as well as budgeting constraints that are often encountered in the Maritimes when helping to provide costing solutions to her clients.

She plays a hand-on-role in the delivery of cost consulting services for her projects and is experienced with developing order of Magnitude, Class C, Class B and Class A estimates including cost plans, cost checks and pre-tender estimates, trade-by-trade breakdowns and building cost comparison studies.

RELEVANT EXPERIENCE

- East Hants Aquatic Centre, District of East Hants, NS
- Dalhousie LeMarchant Mixed Use Facility, Halifax, NS
- Mi'kmawey Cultural Centre, Debert, NS
- Halifax Ferry Terminal, Phase 2 & 3.
- Glace Bay Recreational Facility
- Queen's Place Multi-Use Recreational Complex
- East Hants Sportsplex
- DeWolfe Pavilion, Bedford NS
- Beaverbank Kinsac Community Centre
- Wanders Field House, Halifax, NS
- Port Hawkesbury Civic Centre & Community Centre
- Moncton 4-Plex (Tim Horton Centre) Moncton NB
- St. Francis Xavier University, Millennium Centre
- Summerside Wellness Centre, PEI

APPENDIX B

FULL SIZE SCHEDULES

BARRINGTON PROJECT SCHEDULE

Municipality of the District of Barrington	Task By				Date	Engagement									Start Up, Consultation & Design Development																Tender Docs			
	PM	A	E	MoDB	Complete		JULY					AUGUST				SEPTEMBER					OCTOBER				NOVEMBER					DECEMBER				JANUARY			
Step 1 - Engagement						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Award Letter Received	■			■	Wk1																													
Project Kick-off Meeting		■		■	Wk2																													
Initial Site Visits & Research		■	■		Wks2-3																													
Step 2- Design Development																																		
Program Requirements Consultations	■	■	■	■	Wks2-10																													
Site Planning	■	■	■	■	Wks2-14																													
MoDB Review Program Requirements					31-Aug										★																			
Design & Outline Specifications	■	■	■		Wks 11-16																													
Sub-Consultants System Design	■	■	■		Wks 13-16																													
Cost Estimate Review (Class C)		■	■		Wk 15-17																													
Coordinate & Submit DD Pkg to MoDB		■	■		Wk 16-17																													
MoDB Review Complete Submission	■			■	26-Oct																		★											
Addional Consultation	■	■	■	■	Wk 19-22																													
MoDB Review Final Program	■			■	30-Nov																						★							
Final Design		■	■		Wk 21-27																													
MoDB Review Final Design	■			■	28-Dec																										★			
Step 3 -Tender & Construction Document																																		
Sub-Consultants Detail Coordination	■	■	■		Wk 23-26																													
Finalize Tender documents		■	■		Wk 26-31																													
Cost Estimate Review (Class A)		■	■		Wk 30-31																													★

snma

BARRINGTON PROJECT TEAM WORK PLAN

			Architecture		Civil	Structural	Mechanical	Electrical	Cost	
			SNMA		Able	CCEL	S+A	S+A	Altus	
	Municipality of the District of Barrington	Duration	**Stephanie Nowe-Morris - PIC**	**Ted Mitchell - PM**	**Jeff Pinhey**	**Michel Comeau - S PEng**	**Troy Droesbeck**	**Tyler Hughes**	**Deanne Bain**	**TOTAL ACTIVITY HOURS/TASK**
A	**Start Up & Site Review**	*2wks*	20	20	5					45
B	**Design Development**	*9 wks*	10	40	20	10	30	20		130
C	**Site Planning**	*13 wks*	80	20	10					110
D	**Review Program Requirements**	*1 wk*	5							5
E	**Design and Outline Specifications**	*7 wks*	10	40		40	35	25		150
F	**Class C Cost Estimates**	*1 wk*	5	5		5	3	3	40	61
G	**MoDB Review**	*1 wk*	5							5
H	**Additional Consultation**	*4 wks*	15	15	5		10	5		50
I	**MoDB Review**	*1wk*	5							5
J	**Final Design**	*7 wks*	60	60		5	15	5	15	160
K	**MoDB Review**	*1 wk*	10	10			5	5	5	35
G	**Tender Documents**	*4 wks*	120	120	10	40	40	30		360
	Total Hours per Team Member		345	330	50	100	138	93	60	**1116**

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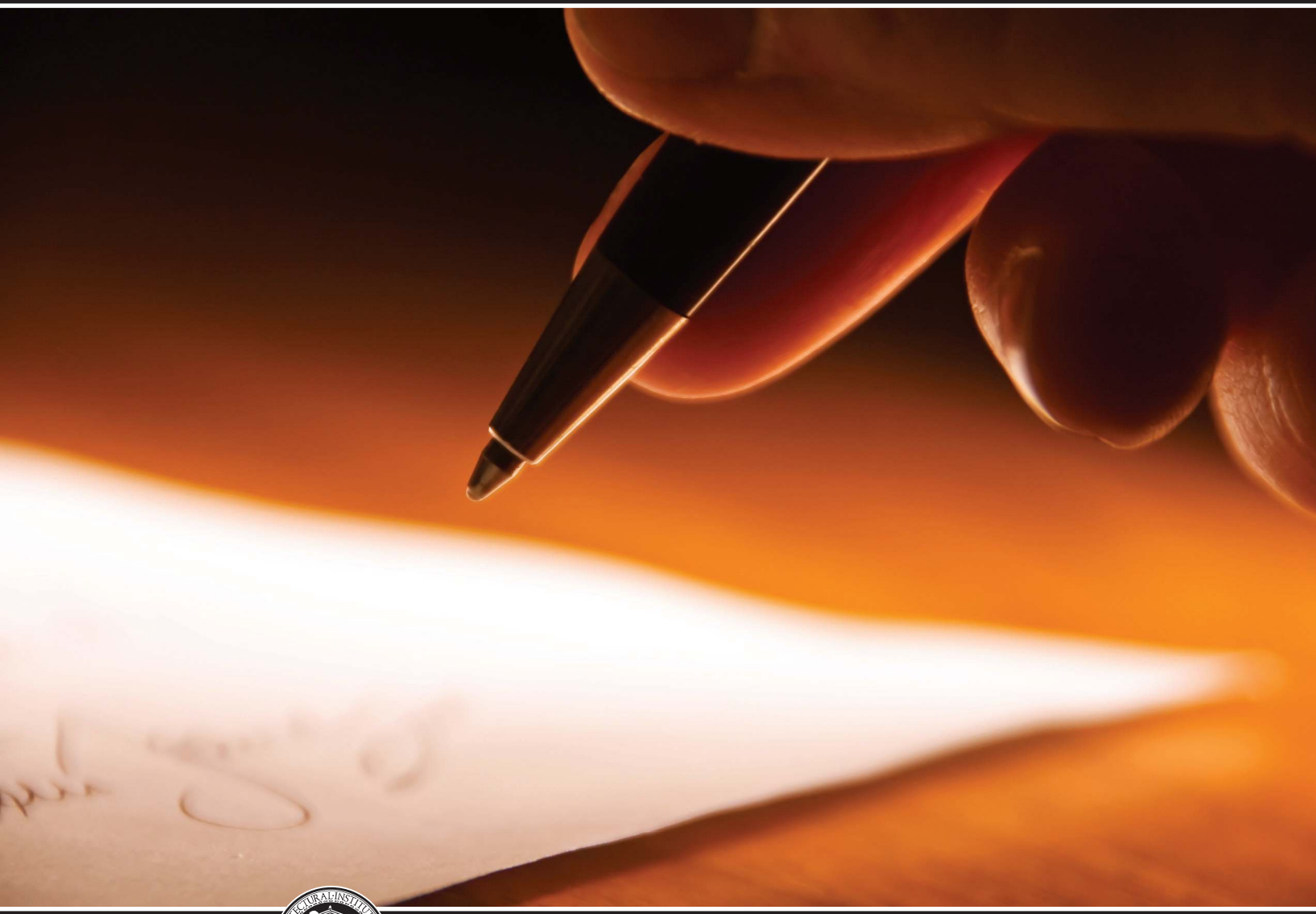
A Guide to

Determining Appropriate Fees for the Services of an Architect



The Royal Architectural Institute of Canada

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Preface

This guide has been developed by the Royal Architectural Institute of Canada to assist Architects and their Clients in determining appropriate fees for Architect's services.

Following the Second World War, expectations and roles within the design and construction industry were consistent and clearly understood. Architect's services for any building project were very much the same and builders generally performed in a consistent manner based on a standard set of customs and procedures. Therefore it was relatively easy to identify a typical fee for services of an Architect for a particular building type. A schedule of fees for architectural services based on a percentage of the construction cost was widely accepted and used.

Today the situation has changed and it is necessary to examine every single building project to determine the appropriate fee for an Architect's services. The practice of architecture and the provision of architectural services have evolved considerably. The Architect and Client must agree upon a wide range of project requirements and negotiate a fee based on each unique project. Some of the reasons for this include:

- Widely different Authorities Having Jurisdiction and approval processes based on building type and jurisdiction;
- Increasingly complex and sophisticated building systems and technologies;
- Different forms of project delivery;
- Project phasing with multiple building occupancies at various different times;
- Numerous additional specialists to consult and coordinate;
- Additional (or reduced) levels of services depending on each project and its method of delivery;
- Wide variations in construction costs;
- New project design and documentation requirements such as Building Information Modeling;
- Requirements for third-party certification (such as LEED®);
- New demands for rapid construction and tight schedules;
- Greater overhead costs as a result of extensive and complex "Requests for Proposals" and new marketing expenses;
- Greater expectations for energy conservation and building performance;
- Extensive submissions at various stages of project documentation.

Because of these significant changes in the design and construction industry, it is impossible to assume that the same professional fee will be appropriate for all projects even if the projects are of the same size and the same building type. This document will help all parties in determining the appropriate fee for an Architect's services for their unique building project.

Questions or suggestions regarding an Architect's fees are welcome and should be directed to:

The Royal Architectural Institute of Canada
55 Murray Street, Suite 330
Ottawa, Ontario, K1N 5M3
Canada

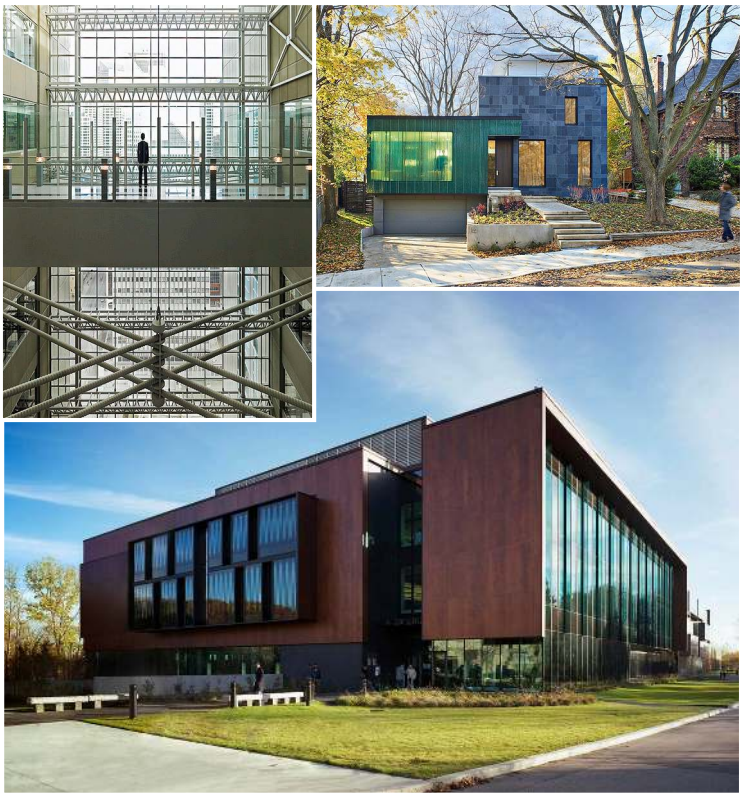
Telephone: 613 241-3600
Email: info@raic.org
Web: www.raic.org

Additional copies may be purchased through the RAIC Document Order Centre at http://members.raic.org/practice_documents.php?language=1

The Value of an Architect *(Architecture matters)*

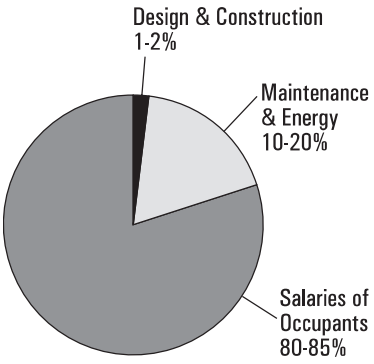
"We all dwell in buildings. Most of our waking hours and all our sleeping ones are spent in shelter. We cannot avoid seeing where we live. At all scales from intimate to the greatest, for better or worse, we interact with our buildings"

Architecture is the sole profession whose members are qualified to design and to provide advice, including technical and aesthetic judgment, on the built environment. Architects provide services and solutions with technical competence and aesthetic sensitivity suitable to the physical, social, cultural, and economic environment, thereby inspiring the community and its citizens. In matters of public health and safety, architects are obliged to serve the public interest and respond to the public need. And now, these concepts of health and safety have been expanded to encompass the sustainability of the global environment and accessibility for all persons.



Clockwise from top-left – **Calgary Courts Centre** | architect: Kasian Architecture Interior Design and Planning Ltd. | photo: Robert Lemermeyer – **Forest Hill House** | architect: Paul Raff | photo: Steve Tsai – **Hazel McCallion Academic Learning Centre** | architect: Shore Tilbe Irwin & Partners | photo: Ben Rahn, A-Frame Photography

Architects add value to building projects by ensuring their design and layout is functional, their construction is durable and energy-efficient, and their look and visual impact provides a positive experience and increased market value to owners and users.



NOTE: Architectural services are usually around 10% of total of all Design and Construction Costs; therefore, architect's fees can be as low as 0.01 percent of the lifecycle costs for owning and operating a facility. This is an inappropriate place to cut costs, particularly when the savings through good design can be as significant over the lifecycle of a building.

Architects are trained to explore new and innovative solutions to problems.

An architect is invaluable on any building project and furthermore, the use of architectural services by a licensed or registered architect is a requirement for many building types or "Occupancies" as required by building codes across Canada.

Architects need to educate clients about the value of architectural services and how an architect's ideas and knowledge can result in significant increases to the real estate value of a building as well as savings in the building's operating and maintenance costs. The chart above illustrates that the architect's fees are indeed a very small fraction of the total costs for constructing and owning a building. This important upfront investment in professional services can have very significant impacts on future costs of the ownership of any building.

1 Architect's Compensation

1.1 Methods of Compensation

There are several different methods of compensation for an Architect's services and all of these are described in this section. The common methods of compensation include:

- Lump Sum or Fixed Fee
- Time basis
- Percentage-based Fee

Very often the project and Client are best served by a combination of these various methods of compensation rather than one single fee. Frequently, it is more appropriate to use one method of compensation for one phase of the project and a different method of compensation for another phase.

For example, in the dealing with Authorities Having Jurisdiction and obtaining approvals for a project, which can be indeterminate in complexity and time, it may be fair to compensate the Architect on an agreed-to hourly rate. However, the project documentation could then be compensated on a percentage fee based on the construction cost for the project.

In another instance, specific determinate services, such as the preparation of an architectural rendering or marketing materials, could be provided at a fixed price or lump sum. Other services for the same project could, in turn, be compensated on a per diem rate or percentage of the construction cost.

1.1.1 Lump Sum or "Fixed" Fee

A lump sum or fixed fee is an amount negotiated with the Client for professional services that can be sufficiently defined at the outset of the project. This arrangement is only suitable if the scope of the project and its construction schedule and other variables can be determined with reasonable accuracy by the Architect.

The fixed fee for such assignments is negotiated after the Architect has prepared a comprehensive estimate of work hours and overhead costs.

The fee then becomes effectively a guaranteed price, unless project parameters, beyond the Architect's control, change. If these conditions change, or if the size of the project or scope of the architectural services increases or decreases, then the Architect's lump sum fee must be adjusted.

A lump sum fee would normally be higher than the percentage-based fee for the same building project.

1.1.2 | Time basis

Time basis fees are fees which are charged on an agreed-to hourly or daily (per diem) rate. This method of compensation is useful when the services are difficult to determine in advance or they are interim in nature and often short in duration.

Time-basis fees are typically used for the following:

- services which are not well defined;
- partial services;
- additional services;
- conceptual design;
- for a particular phase of the project;
- for services as an expert witness;
- renovation projects;
- specialist expertise or services.

The actual hourly rates vary across the country and by the level of experience and seniority of the Architect and staff. Architects are professionals with extensive training (sometimes the internship and licensing process for Architects is considerably longer than that for other professionals, including medical doctors or lawyers) and therefore the hourly rates for Architects will correspond to the local market, to the Architect's experience and expertise, and to the rates of other licensed professionals in the region.

Hourly billing can utilize fixed dollar rates (such as $250 per hour) or they can use a fee multiplier. There are two types of multipliers – one which is a multiplier of "Direct Salary Expenses" and another which is a multiplier of "Direct Personnel Expenses". Direct Personnel Expenses are the most common. When the rates for Architects and their staff are based on "Direct Personnel Expenses" they include those items listed in the Definitions section of this document.

Additional factors should be considered for overtime expenses if such work is undertaken at the Client's request or to meet scheduling demands beyond the Architect's control.

The hourly or per diem (daily) rates for Architects and their staff should be agreed at the outset and, additionally, the Client and Architect should agree upon a time period for review and adjustment of the hourly rates (perhaps annually) in order to adjust for inflation and other factors.

Please note that charging for basic architectural services on a time-basis does not mean that the total fee for services will be any lower or reduced in comparison with the corresponding percentage-based fee. Furthermore, hourly or per diem rates cannot be used with a maximum upset limit.

1.1.3 | Percentage-based fee

A percentage-based fee is a method of compensation which links the fee for the Architect's services to a percentage of the construction cost of the project. The percentage will vary depending on the type of building, the construction value, and the type of construction contract, and of course, the other variables (fee adjustments) described in the next section.

It is possible using a percentage-based fee to calculate architectural fees on a net basis, that is *excluding* all engineering and specialist consultant fees. On the other hand, it is also possible to calculate a percentage-based fee including the normal basic engineering services for structural, mechanical and electrical engineering. This document includes charts which illustrate both methods.

Generally speaking, percentage-based fees are based on sliding scales taking into account both the size and complexity of the project and the construction cost. The sliding scales are not suitable for many renovation projects nor for very complex or custom projects. The fee indicated on the sliding scale is intended to be a starting point for discussion. It is a baseline fee which must then be revised using the various *fee adjustment factors* to determine an appropriate fee for architectural services for the unique project.

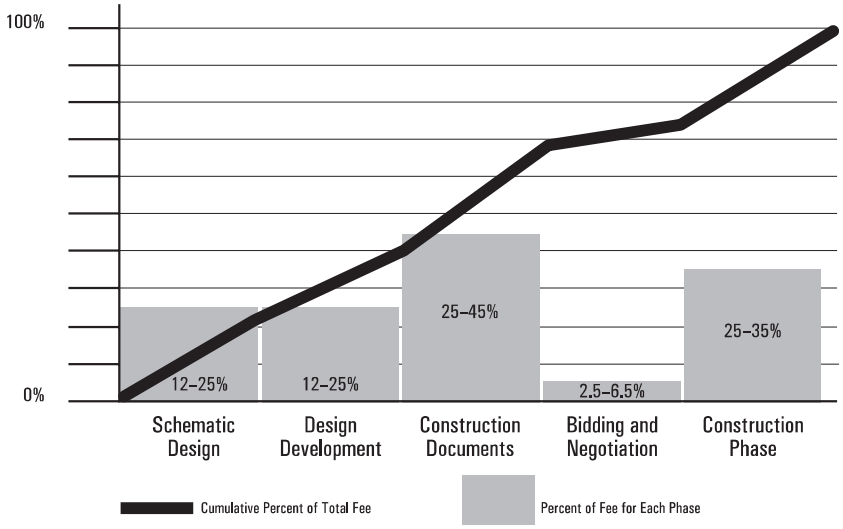
When calculating the distribution of the fee over the traditional five phases of a project, the following breakdown is typical:

PHASE	PERCENTAGE OF TOTAL FEE
Schematic Design	12 - 18%
Design Development	12 - 18%
Construction Documents	35 - 45%
Bidding and Negotiation	2.5 - 6.5%
Construction Phase *(Contract Administration)*	25 - 35%

NOTE:

In new forms of project design and documentation such as Building Information Modeling or BIM, more documentation and design is done in the early phase. Typical allocation of the fee in BIM projects is Schematic Design 25%, Design Development 25% and Construction Documents 25%.

Typical Allocation of Fees for a "Traditional" Architectural Project



Typically, services are rendered and payments are made progressively, with final accounting for traditional basic services (100% of the total fee) at 12 months following Substantial Performance of the construction or sometimes after the preparation of the final Certificate for Payment to the contractor.

1.1.3.1 | Construction Costs

It is important for the client to have a full understanding of the term and definition for Construction Costs because this is the basis for calculating the fee using the percentage which has been negotiated.

The definition states:

> *Construction cost is the contract price(s) of all project elements designed or specified by or on behalf of the architect, permit fees, contingency amounts, and all applicable taxes including such value-added taxes as the GST, whether recoverable or not. Where there is no contract price for all or part of the project, the Construction Cost shall be the estimated cost of the construction as determined by the architect (or the agreed-upon cost consultant's estimate), at market rates at the anticipated time of construction. The Construction Cost does not include the compensation of the architect, the architect's consultants, the land cost or other costs which are the client's responsibility.*

NOTE 1: In the event that there is a construction manager instead of, or in addition to, a general contractor, the construction manager's fee is included in the cost of construction.

NOTE 2: Some provincial associations exclude value-added taxes and increase the percentage-based fee accordingly.

At the project outset, the construction cost is a mutually understood and agreed to budget. As the project develops, estimates of the construction cost are prepared and further refined until the actual contract price or construction cost is known. The figure usually is adjusted again during construction based upon mutually agreed amounts at the beginning of each phase. The fee is based on the following amounts at each phase of the project:

PHASE	AMOUNT$
Schematic Design	agreed to budget for construction at end of phase
Design Development	preliminary cost estimate at end of phase
Construction Documentation	cost estimate at end of phase
Bidding and Contract Negotiation	bid price
Construction Administration	final construction cost *(bid price with adjustments for extras, deletions as per all change orders)*

Refer to **Appendix C** for further details and sample calculations

Because there are several building categories as noted in the previous section, the following chart outline fees based on the percentage of construction costs. The variables outlined in this section will need to be assessed in order to adjust the percentage-based fee appropriately.

Base Percentage Fee by Building Category (in millions) – *New Construction*
WITHOUT Basic Engineering Fees

CONSTRUCTION COST:		< $500,000	$500,000 - 1M	$1M - 2M	$2M - 5M	$5M - 10M	$10M - 25M	$25M - 50M	$50M -100M	$100M - 250M	$250M - 400M	$400M - 500M
BUILDING CATEGORY	COMPLEXITY	To be negotiated with minimum base fee of										
1	simple	6.80	5.15	4.15	4.00	3.85	3.75	3.45	2.80	2.60	2.50	2.40
	average		5.83	4.83	4.55	4.35	4.25	3.98	3.30	3.10	3.00	2.90
	complex		6.50	5.50	5.10	4.85	4.75	4.50	3.80	3.60	3.50	3.40
2	simple	7.85	6.75	5.75	4.80	4.60	4.50	4.20	3.75	3.65	3.55	3.45
	average		6.85	6.38	5.65	5.43	5.15	4.90	4.35	4.70	4.60	4.50
	complex		8.00	7.00	6.50	6.25	5.80	5.60	4.95	5.75	5.65	5.55
3	simple	8.30	6.60	5.60	5.20	5.10	4.85	4.60	4.15	4.00	3.90	3.80
	average		7.30	6.30	5.85	5.70	5.50	5.23	4.75	4.58	4.48	4.38
	complex		8.00	7.00	6.50	6.30	6.15	5.85	5.35	5.15	5.05	4.95
4	simple	9.00	7.00	6.00	5.60	5.35	5.20	4.80	4.30	4.15	4.05	3.95
	average		8.00	7.00	6.60	6.38	6.20	5.80	5.23	5.08	4.98	4.88
	complex		9.00	8.00	7.60	7.40	7.20	6.80	6.15	6.00	5.90	5.80
5	simple	9.75	7.50	6.50	6.10	5.90	5.65	5.40	4.50	4.40	4.30	4.20
	average		8.75	7.75	6.95	7.05	6.70	6.40	5.38	5.20	5.10	5.00
	complex		10.00	9.00	7.80	8.20	7.75	7.40	6.25	6.00	5.90	5.80
6	simple	9.50	7.60	6.60	6.25	6.10	5.75	5.45	5.15	5.00	4.90	4.82
	average		8.50	7.50	7.13	6.93	6.63	6.33	6.05	5.98	5.85	5.76
	complex		9.40	8.40	8.00	7.75	7.50	7.20	6.95	6.95	6.80	6.70
7	simple	12.50	11.50	10.50	9.75	9.25	8.75	8.25	7.75	7.25	6.75	6.25
	average		14.25	13.25	12.63	12.13	11.63	11.13	10.63	10.13	9.63	9.13
	complex		17.00	16.00	15.50	15.00	14.50	14.00	13.50	13.00	12.50	12.00

NOTES: Average Fees for each category are in the range between the simple and complex percentages

Fee includes coordination of basic engineering services only

Fees must be adjusted based on fee adjustment factors listed on page 11

Simple means utilitarian character without complication of design, a minimum of finishes and very basic structural mechanical and electrical design

Average means conventional character requiring normal coordination, detailing, structural mechanical and electrical designs and systems

Complex means exceptional character and complexity of design requiring more advanced systems and coordination of structural, mechanical and electrical design.

Base Percentage Fee by Building Category (in millions) – *New Construction*
WITH Basic Engineering (structural, mechanical and electrical ONLY)

CONSTRUCTION COST:		< $500,000	$500,000 - 1M	$1M - 2M	$2M - 5M	$5M - 10M	$10M - 25M	$25M - 50M	$50M -100M	$100M - 250M	$250M - 400M	$400M - 500M
BUILDING CATEGORY	COMPLEXITY	To be negotiated with minimum base fee of										
1	simple	8.80	6.90	6.45	6.51	6.37	6.18	5.90	5.60	5.37	5.08	4.97
	average		7.80	7.50	7.40	7.20	7.00	6.80	6.60	6.40	6.10	6.00
	complex		8.70	8.55	8.29	8.03	7.82	7.70	7.60	7.43	7.12	7.03
2	simple	9.80	8.67	7.67	7.14	6.95	6.99	6.69	6.55	5.75	5.48	5.37
	average		8.80	8.50	8.40	8.20	8.00	7.80	7.60	7.40	7.10	7.00
	complex		10.28	9.33	9.66	9.45	9.01	8.91	8.65	9.05	8.72	8.63
3	simple	10.80	8.86	8.44	8.36	8.23	7.94	7.75	7.51	7.34	7.06	6.95
	average		9.80	9.50	9.40	9.20	9.00	8.80	8.60	8.40	8.10	8.00
	complex		10.74	10.56	10.44	10.17	10.06	9.85	9.69	9.46	9.14	9.05
4	simple	11.80	9.45	9.00	8.82	8.56	8.39	8.11	7.90	7.69	7.41	7.29
	average		10.80	10.50	10.40	10.20	10.00	9.80	9.60	9.40	9.10	9.00
	complex		12.15	12.00	11.98	11.84	11.61	11.49	11.30	11.11	10.79	10.71
5	simple	12.80	10.11	9.65	10.01	9.37	9.28	9.11	8.87	8.80	8.52	8.40
	average		11.80	11.50	11.40	11.20	11.00	10.80	10.60	10.40	10.10	10.00
	complex		13.49	13.35	12.79	13.03	12.72	12.49	12.33	12.00	11.68	11.60
6	simple	13.80	11.44	11.00	10.88	10.75	10.42	10.17	9.87	9.54	9.30	9.20
	average		12.80	12.50	12.40	12.20	12.00	11.80	11.60	11.40	11.10	11.00
	complex		14.16	14.00	13.92	13.65	13.58	13.43	13.33	13.26	12.90	12.80
7	simple	15.25	13.50	12.70	11.35	11.07	10.78	10.49	10.19	9.88	9.00	8.72
	average		16.80	15.50	12.40	14.20	14.00	13.80	13.60	13.40	12.10	12.00
	complex		19.00	18.30	17.45	17.33	17.22	17.11	17.01	16.92	15.71	15.25

NOTES: Average Fees for each category are in the range between the simple and complex percentages

Fee includes coordination of basic engineering services only

Fees must be adjusted based on fee adjustment factors listed on page 11

Simple means utilitarian character without complication of design, a minimum of finishes and very basic structural mechanical and electrical design

Average means conventional character requiring normal coordination, detailing, structural mechanical and electrical designs and systems

Complex means exceptional character and complexity of design requiring more advanced systems and coordination of structural, mechanical and electrical design.

1.1.5 | Other

Occasionally, in some provinces, architects are paid on a unit basis for projects such as multiple-unit housing or hotels, which have a repetitive element. Unit fee determinations are frequently arbitrary and do not relate to the nature and scope of architectural services.

1.2 | Fee Adjustment Factors / Variables affecting the Architect's Fee

As indicated in the preface to this document the design and construction industry has become increasingly complex and each project will be subject to certain unique factors which must be considered when determining an appropriate fee.

A list of these variables or fee adjustment factors is outlined below; however, this list is not exhaustive and certain Building Owners and Clients or Architects may have other factors which affect the cost of professional services for the building project. Some of these factors include:

- Scope of Services
    - Pre-design or upstream services
    - Traditional Architectural Design Services
    - Other Services
- Project Delivery Method and Construction Procurement
    - Sequential Tendering
    - Design-Bid-Build
    - Design-Build
    - Public Private Partnerships (P3)
    - Other
- Schedule and Fast Track Projects
- Project Documentation and Computer Modeling
- Specialist Consultants
- Approvals and Authorities Having Jurisdiction
- Submittals
- New Technologies
- Construction Administration
- Project Location and Site Conditions
- Renovation to existing Buildings (versus New Construction)
- Repeat Work or Repetitive Designs
- Architect's Personnel

- Demobilization and remobilization (Stop and Start-up of Workforce)
- Phased Building Occupancies

Often the variable is rated on a scale from 1 to 5, or as a percentage or multiplier used to adjust the fee. Sometimes the variable may result in a reduced fee such as for repetitive design work, limited project documentation, or the elimination of an entire phase (such as bidding and contract negotiation if undertaken by the Owner).

This guide proposes the following variables as multipliers:

0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5

when there are no variables and basic services only are required

Once the Client and Architect have determined the building type, the project and construction budgets, the method of project delivery, the role of consultants, and the scope of services, together with other fee adjustment factors noted above, it is then possible to negotiate a fee for architectural services for the specific building project. All factors must be compounded and multiplied in order to determine the appropriate final fee for each unique project.

Refer to the matrix or worksheet in **Appendix B** at the end of this document to assist in using these variables to determine the appropriate fee.

1.2.1 | Fee Adjustment Factor 1 – Scope of Services

It is absolutely necessary for the Client and Architect to have a mutual understanding of the services required and expected. The Schedule of Architect's Services used in RAIC Document Six or Document Seven is a good checklist to ensure a mutual understanding and agreement (refer to **Appendix E**). If the Architect is providing "Partial" or "Additional" services then the basic fee will need to be reduced or increased accordingly.

Refer also to the Checklist: Scope of Service on page 14.

1.2.1.1 | Pre-design or "upstream" services

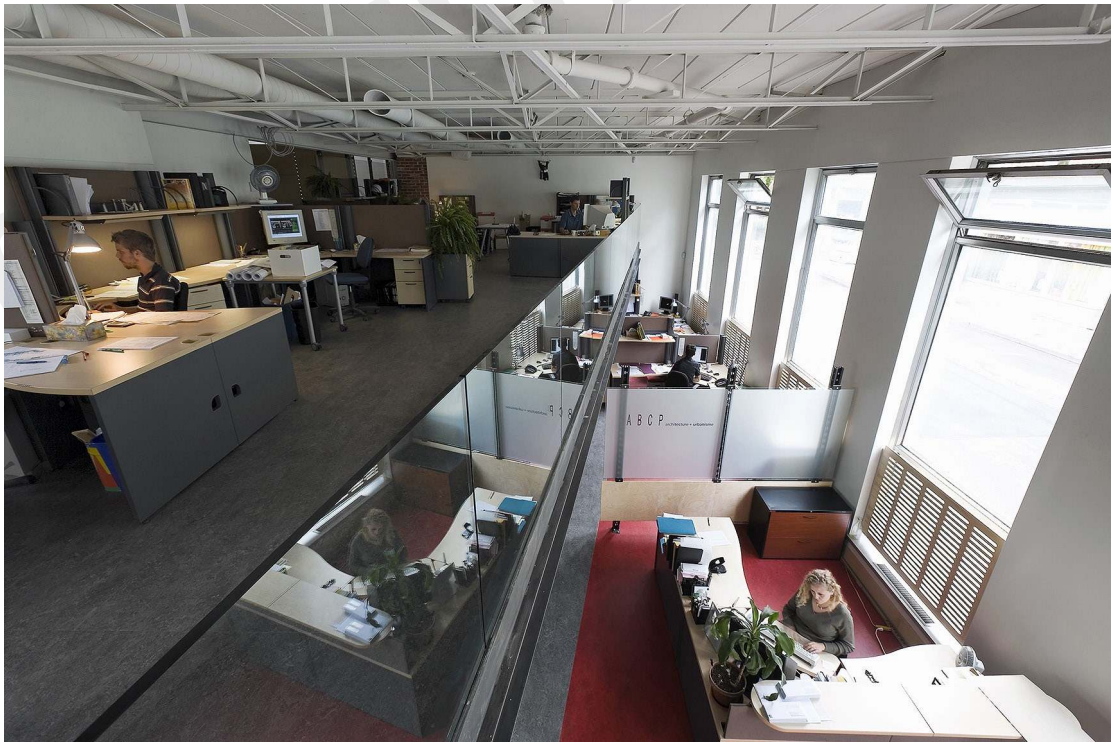
Very often a client will not have completed preliminary studies or obtained the necessary data to commence architectural design. The Architect may provide these services for an additional fee (such as the preparation of a functional program or design brief) or arrange for the necessary consultants to prepare the work (such as a geotechnical survey).

1.2.1.2 | Traditional Architectural Design Services

Traditional architectural design services usually means a five-phased approach for the design and construction of a building:

- Schematic Design;
- Design Development
- Construction Documents
- Bidding or Negotiation
- Construction – Contract Administration

These phases are well described in the following chart outlining the typical services for each phase. Note that "Pre-design" services and "Post-construction" services are **not** part of the traditional services and are also **not** part of the basic percentage fee listed in the Chart.



ABCP architecture + urbanisme office | architect: François Moreau | photo: Paul Dionne

Checklist: Scope of Services

This chart is a typical checklist of services offered by the architect and his or her sub-consultants.
The nature of the individual project and the services customized to the client's needs will determine the scope of services required.

Project Inception	*Project Assessment*	*Concept Approval*	*Approvals from Authorities*	*Awards of Construction Contract*		*Substantial Performance of Construction/Occupancy Permit*
1.0 PRE-DESIGN	**2.0** SCHEMATIC DESIGN	**3.0** DESIGN DEVELOPMENT	**4.0** CONSTRUCTION DOCUMENTS	**5.0** BIDDING OR NEGOTIATION	**6.0** CONSTRUCTION — CONTRACT ADMINISTRATION	**7.0** POST-CONSTRUCTION
ARCHITECT'S SERVICES ○ Facility Programming ○ Space Relationships/ Flow Diagrams ○ Project Development Scheduling ○ Project Budgeting ○ Life Cycle Cost Studies ○ Economic Feasibility Studies ○ Agency Consulting/ Review/Approval ○ Site Selection/Analysis Utilization ○ Environmental Studies ○ Energy Studies ○ Existing Facilities Surveys ○ Client-Supplied DataCoordination ○ Services Related to Project Management ○ Presentations ○ Marketing Studies ○ Project Financing ○ Special Studies ○ Re-Zoning Assistance ○ Project Promotion SPECIAL CONSULTANTS' SERVICES ○ Legal Survey ○ Geotechnical Analysis	ARCHITECT'S SERVICES ○ Client-supplied Data Coordination ○ Program and Budget Evaluation ○ Review of Alternative Design Approaches ○ Architectural SchematicDesign ○ Schematic Design Drawings and Documents ○ Statement of Probable Construction Costs ○ Client Consultation ○ Interior Design Concepts ○ Special Studies (Future Facilities, Environmental Impact, etc.) ○ Special Submissions or Promotional Presentations ○ Special Models, Perspectives or Computer Presentations ○ Project Management ○ Agency Consultation CONSULTANTS' SERVICES ○ Structural Design Concepts ○ Mechanical Design Concepts ○ Electrical Design Concepts ○ Statements of Probable Costs SPECIAL CONSULTANTS' SERVICES ○ Civil Design Concepts ○ Landscape Concepts ○ Statements of Probable Costs	ARCHITECT'S SERVICES ○ Client-supplied Data Coordination ○ Design Coordination ○ Architectural Design Development ○ Design Development Drawings and Documents ○ Statement of Probable Construction Costs ○ Client Consultation ○ Interior Design Development ○ Special Studies/Reports (Planning Tenant or Rental Spaces, etc.) ○ Promotional Presentations ○ Models, Perspectives or Computer Presentations ○ Project Management ○ Agency Consultation CONSULTANTS' SERVICES ○ Structural Design Development ○ Mechanical Design Development ○ Electrical Design Development ○ Statements of Probable Costs SPECIAL CONSULTANTS' SERVICES ○ Civil Engineering Design Development ○ Landscape Development ○ Detailed Construction Cost Estimates or Quantity Surveys	ARCHITECT'S SERVICES ○ Client-supplied Data Coordination ○ Project Coordination ○ Architectural Construction Documents (Working Drawings, Form of Construction Contract and Specifications) ○ Document Checking and Coordination ○ Statement of Probable Construction Costs ○ Client Consultation ○ Interior Construction Documents ○ Alternative Bid Details and Special Bid Documents ○ Project Management ○ Agency Consultation CONSULTANTS' SERVICES ○ Structural Construction Documents ○ Mechanical Construction Documents ○ Electrical Construction Documents ○ Statements of Probable Costs SPECIAL CONSULTANTS' SERVICES ○ Civil Engineering Construction Documents ○ Landscape Documents ○ Detailed Construction Cost Estimates or Quantity Surveys	ARCHITECT'S SERVICES ○ Client-supplied Data Coordination ○ Project Coordination ○ Issue Bidding Documents ○ Issue Addenda ○ Bid Evaluation ○ Construction Contract ○ Client Consultation ○ Separate Bids or Negotiated Bids ○ Services Related to Bidders' Proposals ○ Project Management CONSULTANTS' SERVICES ○ Issue Bidding Documents ○ Issue Addenda ○ Bid Evaluation SPECIAL CONSULTANTS' SERVICES ○ Issue Bidding Documents ○ Issue Addenda ○ Bid Evaluation	ARCHITECT'S SERVICES ○ Construction Review ○ Progress Reports/ Evaluation ○ Process Certificates for Payment ○ Interpretation of Contract Documents ○ Review of Shop Drawing Product Data/Sample ○ Change Orders ○ Substantial Performance Report and Certification ○ Client Consultation ○ Interior Construction Inspection ○ Full-time Project Representation ○ Administration of Separate Contracts ○ Project Management ○ Promotional Material ○ Record Drawings ○ Agency Consultation CONSULTANTS' SERVICES ○ Structural Inspection/ Reports ○ Mechanical Inspection/ Reports ○ Electrical Inspection/ Reports ○ Record Drawings ○ Certification of Progress SPECIAL CONSULTANTS' SERVICES ○ Civil Construction Inspection ○ Landscape Inspection ○ Detailed Cost Accounting	ARCHITECT'S SERVICES ○ Field Review ○ Deficiency Assessment ○ Instructions for Correction of Deficiencies ○ Review of Warranties ○ Total Performance Inspection and Certification ○ Client Consultation ○ Start-up Assistance ○ One-year Warranty Inspections OTHER SERVICES ○ Fine Arts/Crafts/ Graphics ○ Non-building Equipment Selection ○ Building Analysis and Reports ○ Services Related to Alterations and Demolition ○ Life Cycle Cost Monitoring ○ Environmental Monitoring ○ One-year Warranty Inspections CONSULTANTS' SERVICES ○ Start-up Assistance ○ Systems Performance Review ○ Non-building Equipment Selection ○ Life Cycle Cost Monitoring ○ Services related to Alterations and Demolition

1.2.1.3 | Other Services

In addition to the traditional architectural design services noted above, many architects provide a wide range of other or "additional" services. Some architects specialize in some of these other services. For a list of these other services, please refer to **Appendix F**.

1.2.2 | Fee Adjustment Factor 2 – Project Delivery Method and Construction Procurement

The type of project delivery or procurement of construction services can have a big impact on the Architect and the fee. Small projects with experienced and reliable contractors may require basic field review and contract administration services. However more complex projects, builders with limited experience, and newer methods of project delivery beyond the traditional design-bid-build will require more time, more services and consequently additional fees. Furthermore, the type of construction contract can affect the Architect's fee. For example "Cost Plus " contracts or Unit Price contracts (as opposed to Stipulated Sum Contracts) require additional contract administration services for the preparation of Certificates for Payment, therefore, the fee must be increased.

1.2.2.1 | Design-Bid-Build

Design-Bid-Build is the traditional form of project delivery and the percentage-based fee chart is based on this form of construction procurement. In this instance, the architectural design and construction documents are completed and one single bid package is prepared. Following bidding and preparation of one contract with one builder or general contractor, the construction contract is administered by the Architect.

1.2.2.2 | Sequential Tendering

Sequential tendering involves separating the contract documents (such as bid documents, specifications and construction drawings) into separate packages to receive multiple bids for different parts of the work to be constructed at different times, usually in the sequence of construction (such as site work, foundations, etc.) This separation and preparation of multiple bid packages and the administration of several bids and contracts requires additional services by the Architect and consequently the fee must be adjusted to compensate for this additional work.

1.2.2.3 | Design-Build

If it is decided that a Design-Build team should be responsible for both the design as well as the construction of the project, a "Design-Build" option might be appropriate.

The Client will benefit from an Architect (sometimes called the Owner's Advisor) who specifies the requirements of the building contract (sometimes called the Owner's Statement of Requirements). The contractor should also engage a separate Architect to develop the design.

More information on the Design-Build process can be obtained from the Canadian Design-Build Institute at www.cdbi.org

1.2.2.4 | Public-Private Partnership

(Also referred to as P3 or Alternative Financing and Procurement or AFP in Ontario)
In these various forms of project delivery the Client or Owner usually contracts with one entity. This entity may assume responsibility and usually integrates all aspects of the project including: financing, design and construction, operation and maintenance. This arrangement is increasingly common for larger projects, including infrastructure projects where various levels of government transfer the financing to the private sector. Typically this single entity (not necessarily the owner of the building) engages the Architect. The Architect may or may not have the opportunity to develop a professional relationship with the ultimate users of the project.

1.2.2.5 | Other

There are a variety of other forms of procurement. One of these includes the use of a Construction Manager who may work with the Architect and provide services such as cost estimating and advice on the constructability of a design. In other instances, the Construction Manager may actually hire the Architect directly. Each form of delivery has its own pros and cons and these must be evaluated for each and every project. It is important to remember that the value of an Architect is extremely important to the building: the architectural design and impartial service from an Architect usually result in the success of any project.

1.2.3 | Fee Adjustment Factor 3 – Schedule and Fast Track Projects

In today's fast-paced business world there is often a pressure to complete a project as soon as possible in order to occupy the building. This schedule may be necessary to accommodate tenants, to start-up a manufacturing process, or to begin a new school session. Fast track projects require additional fees because the architect may need to hire additional staff, pay staff for overtime work, and re-schedule other work to accommodate the priorities of such a project.

Another factor is extended construction schedules – even with a traditional form of project delivery such as Design-Bid-Build, if the contractor's construction schedule is extended then the Architect's services also must be extended and this increase must be compensated.

1.2.4 | Fee Adjustment Factor 4 – Project Documentation and Computer Modeling

Many clients require unique forms of documentation (such as their own specialized computer standards or "printer-friendly" formats) or there may be a requirement to adjust the computer language or platform to accommodate consultant's, contractor's or the client's needs.

Increasingly there is a demand to develop all designs and the project documentation using a Building Information Model or BIM. Furthermore, there is often a need to provide electronic documents in a variety of formats to several different parties in the development of the project whether for review and approvals, the preparation of shop drawings, or for bidding purposes. This can be very time consuming to provide such a wide range of documentation to many different parties. All of this can be expensive and must result in an adjustment to the Architect's and Consultants' fees.

1.2.5 | **Fee Adjustment Factor 5 –** Specialist Consultants

As noted previously there is need for more and more specialist consultants as technology and regulations expand. The Architect typically coordinates the specialist and subconsultants whether or not they have been retained directly by the Architect or by the Owner. The fee for the services and coordination of specialist consultants is always over and above the fee or normal percentage for the Architect's services.

1.2.6 | **Fee Adjustment Factor 6 –** Approvals and Authorities Having Jurisdiction

The number of approvals from various 'Authorities Having Jurisdiction' continues to grow. At one time, certain projects may have only required a building permit; however, today most projects must be reviewed by several different Authorities. Approvals, such as site plan approvals or site development approvals, and phased building permits are significantly more time-consuming. Providing the necessary documentation; communicating with the relevant Authorities; and accommodating their design and technical requirements, is exceedingly onerous. Requirements vary by jurisdiction and by building type; therefore, the fee must be adjusted for each jurisdiction and for each building type.

1.2.7 | **Fee Adjustment Factor 7 –** Submittals

Certain clients, notably the federal and provincial governments, their agencies and crown corporations, require several submissions of the design and construction documents at various stages of completion. The more frequent the submittals the more costly the effort to prepare the documentation for the submission. The fee must be adjusted to reflect the number of submittals required.

1.2.8 | **Fee Adjustment Factor 8 –** New Technologies

There are new technologies appearing daily including the need for better energy performance, new building products and building systems, advanced construction methods, and design tools. Many clients are anxious to incorporate these latest innovations into their projects. Sometimes this request can be costly as there are often unknown risks in using products or systems that do not have a track record, or, there may be additional certifications, testing, submittals or

approvals required. There may also be additional specialist consultants that need to be retained and coordinated. Frequently, there is also additional research or other services required on the part of the Architect.

1.2.9 | **Fee Adjustment Factor 9 –** Construction Administration

Today many clients are demanding on-site or field review services which are enhanced and beyond the limited and basic reviews that are prescribed in the standard forms of contract. More frequent site visits may be necessary for complex projects, to maintain quality assurance, or if the contractor is less experienced. The Architect and Client should discuss enhanced field reviews (or the level of construction monitoring) at the outset of the project to determine what is required and the necessary fee adjustment for such enhanced field review.

1.2.10 | **Fee Adjustment Factor 10 –** Project Location and Site Conditions

The project location and site conditions may affect the Architect's services. A very tight, dense urban site or a remote site in the north can both have complications in terms of design. Furthermore, a remote site may require travel time and reimbursable expenses considerably beyond the normal. Those factors related to the site conditions and location should be considered when agreeing to the Architect's fee.

1.2.11 | **Fee Adjustment Factor 11 –** Renovation to existing Buildings (versus New Construction)

Renovation work is notorious for its unknown conditions. This is the reason that it is recommended that renovations to existing buildings be performed on a time basis. If a percentage-fee is used the fee needs to be adjusted and increased to allow for the unknown work and the subsequent design modifications the Architects will need to make. Some provincial associations recommend an adjustment of an additional two-thirds of the fee or and adjustment factor of 1.65 for renovations.

1.2.12 | **Fee Adjustment Factor 12 –** Repeat Work or Repetitive Designs

When two or more buildings are constructed for the same client from the same design, the fee for the Architect's services is usually reduced by about 50% (an adjustment factor of 0.5) for all phases of the work except for construction administration which remains the same. As each building is constructed separately construction administration services, including field review, is the same for each. Modifications and adaptations of the design for re-use are often charged on a time-basis.

Any sale of the right to use the design and documents or royalties must be negotiated with the Architect.

1.2.13 | **Fee Adjustment Factor 13 –** Architect's Personnel

There are several factors which may affect the Architect's fee as a result of the Architect's own staff. Overtime work will require additional fees as well as hiring new, specialized expertise. A location other than the Architect's own premises or other unique overhead costs as a result of the project will also need to be accounted for.

1.2.14 | **Fee Adjustment Factor 14 –** Demobilization and Remobilization (Stop and Start-up of Architect's Workforce)

On some projects it is necessary to stop work on the design or preparation of construction documents. Sometimes this is due to a delay in funding approvals or for other circumstances. Such a situation is often problematic for the Architect who has consultants and staff who have been committed to the project and must be reassigned or even released. Similarly, if a project is suddenly "back on the boards" or restarted, the Architect must make the necessary arrangements for staffing and to recommence production work on the project. Such a situation can be costly and can affect the Architect's cash flow and bottom line; therefore it is important to negotiate a fee adjustment.

1.2.15 | **Fee Adjustment Factor 15 –** Phased Building Occupancies

On certain very large and complex projects, building users and clients often want to occupy various parts of a building as soon as their completion. For example, two or three floors on a high-rise hospital may require take-over and commissioning of this section of the building prior to completion of the entire project. This additional requirement adds to the architect's time and services. Multiple occupancies over a period of time for the same project must be considered and the appropriate adjustment to the fee then determined.

1.2.16 | Contingencies

Just as contingencies are always recommended and planned for during construction, it is equally important to plan for contingencies for professional services during the design of a project. Sometimes it becomes necessary to engage specialist consultants, make changes, or redesign due to unforeseen circumstances. A prudent Owner will plan for this and prepare a budget that includes a design contingency for professional fees.

1.3 | Reimbursable Expenses

Normally the Architect incurs direct expenses on behalf of the Client. These expenses relate to the provision of architectural services and the production of instruments of service, such as computer models, drawings and specifications, as a result of designing, documenting, tendering

and constructing a building. These expenses are incurred in the interests of the project and are not covered by professional fees. "Reimbursable expenses" is also a defined term in *RAIC Document Six: Canadian Standard Form of Contract between Client and Architect*.

Reimbursable expenses include:

- transportation in connection with the project for travel authorized by the client (transportation lodging and meals);
- communication and shipping costs (long distance charges, courier, postage, dedicated web hosting, etc.);
- reproduction costs for plans, sketches, drawings, graphic representations and other documents);
- Renderings, models, prints of computer-generated drawings, mock-ups specifically requested by the client;
- Special computer modeling and documentation;
- Certification and documentation costs for third party certification such as LEED®;
- Fees, levies, duties or taxes for permits, licences, or approvals from Authorities Having Jurisdiction;
- Overtime services authorized in advance by the client to the extent that the costs exceed normal Direct Personnel Expenses;
- Additional insurance coverage or limits, including additional professional liability insurance requested by the client in a excess of that normally carried by the architect and the architect's consultants;
- Direct expenses (as above) incurred by the architect's employees, engineering consultants and other consultants.

1.3.1 | Automobile Travel

Article A12 of *RAIC Document Six: Canadian Standard Form of Contract between Client and Architect* requires that the cost per kilometre charged on all automobile travel be inserted in the document. The Treasury Board of Canada regularly publishes rates for each province and territory based on gasoline and other typical automobile expenses.

1.3.2 | Administrative Charges

Reimbursable expenses are normally billed at cost plus an administrative charge (often 10% -15%) to cover in-house administration, handling and financing. Article A11 in the Agreement Form of *RAIC Document Six: Canadian Standard Form of Contract between Client and Architect* provides a space to complete the percentage for the administrative charge.

1.3.3 | Professional Liability Insurance

Most architectural licensing authorities in Canada require that those architectural practices authorized to provide services to the public carry a minimum level of professional liability insurance. And, in those provinces where professional liability insurance is not mandatory, prudent Architects carry this insurance voluntarily.

Standard forms of contract, such as *RAIC Document Six: Standard Form of Contract Between Client and Architect* require (as in the General Condition under "GC 7 Liability of the Architect") the Architect to carry such insurance and allows for the Client to obtain a copy of the Certificate of Professional Liability Insurance. Similarly *RAIC Document Seven: Standard Form of Contract Between Client and Architect Abbreviated Version* requires a copy of the Certificate of Professional Liability Insurance be appended to the document under Schedule C.

The Client must pay, as a reimbursable expense, the cost for the Architect to secure any additional insurance coverage required beyond the general practice insurance.

1.4 | Payment Provisions

The Agreement Form in *RAIC Document Six: Canadian Standard Form of Contract between Client and Architect* also requires other payment provisions to be completed.

1.4.1 | Retainer

A retainer is an advance payment on fees which would be deducted from the final invoice and is accounted as a statement of credit on the Client's account. The amount should be agreed to by the Client and Architect and inserted in Article A13.

1.4.2 | Billing Period

Article A14 indicates that invoices shall be issued monthly. If the frequency of billing should be at different intervals, this clause should be changed to bi-weekly or other time periods such as project milestones.

1.4.3 | Interest

The amount of interest on unpaid invoices should be completed as required in Article A15 as well as the time or number of days when interest calculations commence.

1.5 | Other Payment Provisions

1.5.1 | Statutory Holdbacks

In some provinces or territories Architects have lien rights and their fees are subject to statutory holdbacks depending on the lien legislation in the province or territory. For very large projects this can represent a significant financial burden for an architectural firm, especially for a project whose design and construction can extend over several years.

The Architect and Client may include a clause in the *RAIC Document Six: Canadian Standard Form of Contract between Client and Architect* that permits the Client to pay an early release of holdback on any professional fees for that portion of the Architect's service that is complete if the provincial/territorial lien legislation so provides.

Alternatively, the Client and Architect may decide to **execute multiple and separate contracts for each phase of the project.** For example, on a very large hospital, separate contracts might be developed for each of the design phase, the construction documentation phase, and for contract administration phase. Therefore, at the end of Construction Documentation (when all drawings and specifications are completed and ready for tender) the contract is 100% complete and the holdback period can commence. This significantly reduces the time period for release of the holdback on that particular service phase which includes a significant portion of the fees for such a project.

1.5.2 | Redesign Charges

Occasionally it is necessary to redesign a building. Redesign may be due to changes in functional requirements, reduced funding available, a personnel change in the Client's administration, or for a variety of other reasons beyond the control of the Architect. Redesign charges cover the cost to prepare new designs and make the necessary changes to the drawings and specifications.

Redesign charges are variable and can cost as much as 50% of the original fee depending upon the extent of changes. The Client and Architect should negotiate appropriate fees for redesigning the project.

2 | Building Classifications

Buildings can be categorized in a variety of ways: by occupancy, by building size, by construction cost and by complexity. Each of these factors can have significant impacts on the fee for architectural and engineering services.

2.1 | Occupancy

Building codes in Canada divide buildings by Occupancy, in part because codes must deal with or prescribe the level of public safety required for each Occupancy.

Certain building occupancies **require** the services of an Architect depending upon the jurisdiction.

2.2 | Building Complexity

Some provincial associations have categorized buildings by building complexity, usually from simple to complex buildings, and the categories often refer to the level of architectural services required for the building type.

The RAIC uses the three levels of categories described below, namely: **Simple**, **Average** and **Complex**.

Simple means utilitarian character without complication of design, a minimum of finishes and very basic structural, mechanical and electrical design;

Average means conventional character requiring normal coordination, detailing, structural, mechanical and electrical designs and systems;

Complex means exceptional character and complexity of design requiring more advanced systems and coordination of structural, mechanical and electrical design.

2.3 | Building Size

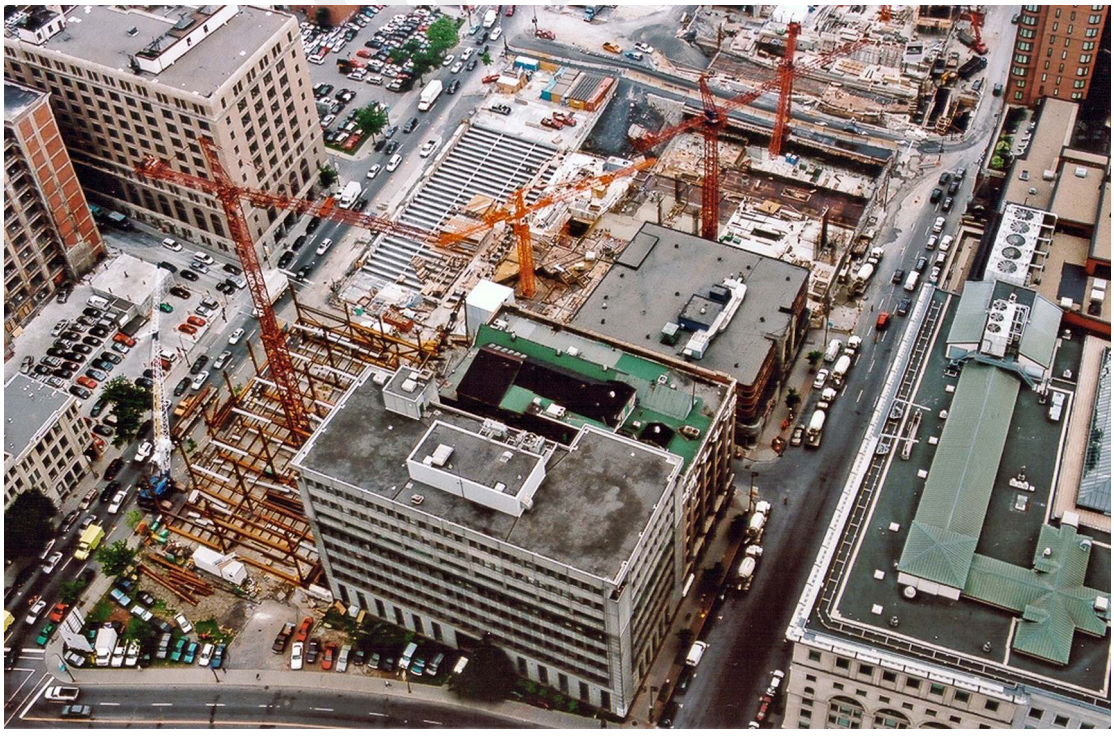
Another a factor in determining architectural fees is the building size or building area. Simple projects, with repetitive elements, may offer certain economies of scale in the provision of architectural services. Smaller projects are often detailed and very time consuming, even though they may be of a relatively low construction cost. For small projects, such as those less than 500 square metres, or under 500,000 dollars in construction value, percentage fees

may not always be applicable and a time basis may be recommended. Similarly for very large projects, over 30,000 square metres, the fee may need to be negotiated.

2.4 | Building or Construction Costs

Another way of categorizing buildings is by their construction cost. If the fee for services is based on construction costs this becomes an important subdivision. Unfortunately building costs can vary across the country. These costs also vary during economic cycles and due to market forces such as supply and demand.

Standard construction cost categories may range from under $500,000 to well over $100,000,000. Generally speaking, as construction values increase the basic percentage fee for Architect's services for certain simple building categories decreases.



CDP Capital Centre | architect: Le consortium Gauthier, Daoust Lestage inc – Faucher Aubertin Brodeur Gauthier – Lemay et Associés | photo: Alain Laforest

2.5 | Building Category or Building Type

Some provincial associations have subdivided buildings by type, and the categories often refer to the level of architectural services required for the particular building type. There are often seven categories or "types" of buildings.

The RAIC has adopted the following Building Categories:

Refer to Appendix D for similar list in alphabetical order.

CATEGORY		
1	1.1	Warehouse
	1.2	Barn, Stable, Storage building, Shed, Kennel, Animal Shelter
	1.3	Self-service Storage Building
2	2.1	Multiple Unit Residential Building (Apartment, Condominium, Dormitory, Townhouse, etc.)
	2.2	Summer Camp, Park Building, Resort Building (Building Shell only)
3	3.1	Armed Forces Base, Barracks, Armoury, Drill Hall
	3.2	Bowling Alley, Dance Hall
	3.3	Motel and Apartment Hotel
	3.4	Marina, Recreational Pier
	3.5	Maintenance Building, Service Garage, Service Station, Car Dealership
	3.6	Administrative Office Building, **excluding** tenant layouts
	3.7	Mercantile Buildings for Business and Personal Services including Store, Shop, Barber and Hairdressing Shop, Supermarket, Shopping Centre, Department Store, but **excluding** tenant layouts
	3.8	Student or Institutional Residence, Senior Citizens' Apartment
	3.9	School – Kindergarten and Elementary School
	3.10	Industrial Building (such as light manufacturing)
	3.11	Specialized Agricultural Building
4	4.1	School – Junior, Middle and Senior High School
	4.2	Post Office and Financial Customer Service Centre (such as Bank Branches)
	4.3	Grandstand, Stadium
	4.4	Convention Hall, Exhibition Building
	4.5	Manufacturing, Processing or Specialized Storage Facility
	4.6	Drycleaning Establishment, Laundry
	4.7	Dairy and Creamery, Distillery
	4.8	Specialized Housing including high-level residential support, Retirement Facility, Shelter for Homeless, Shelter for Women
	4.9	Animal Clinic
	4.10	Police Station, Fire Station, Ambulance Facility
	4.11	Hotel, Complex Motor Hotel
	4.12	Club: Town, Country, Sports, Health
	4.13	Community Centre
	4.14	Freestanding Parking Structure

continued >

NOTE: Fees for Demolition Projects are based on the percentage fee of the building category for the type of building to be demolished.

NOTE: Due to increased design complexity as a result of changing user requirements, such as security, some building types have been moved to a higher category than indicated in some provincial associations' fee schedules.

CATEGORY		
5	5.1	Pedestrian Links and Bridges
	5.2	Freight Handling Terminal, Special Maintenance Garage, Aircraft Hangar
	5.3	Amusement Park Building
	5.4	Telephone Equipment Building, Secure Server Building, Emergency Operations Center
	5.5	Swimming Pool, Ice Arena, Recreation Building, Physical Education Building, Gymnasium
	5.6	Zoo, Animal Hospital, Botanical Gardens
	5.7	Licensed Day Care
	5.8	University or College non-technical Classroom Building, and Vocational High School
	5.9	Theatre, Opera House, Auditorium, Concert Hall
	5.10	Cemetery Chapel, Mausoleum, Crematorium
	5.11	Funeral Home
	5.12	City Hall, Town Hall
	5.13	Museum (exhibition hall as shell, non-complex program without environmental conditions)
	5.14	Restaurant, Licensed Beverage Establishment
	5.15	Church, Place of Worship, Monastery, Convent
	5.16	Long Term Care Facility, Special Care Facility such as a Group Home,
	5.17	Minimum Security Detention Facility
6	6.1	Facility for High-level Medical Care for active diagnostic and acute treatment, Chronic Care Facility, Mental Health Facility and Rehabilitation Facility
	6.2	Medical Research Facility
	6.3	Communications Building, Radio or TV Facility, Studio, Computer Centre
	6.4	Science Building
	6.5	Laboratory
	6.6	Dental Building
	6.7	Observatory, Planetarium
	6.8	Museum, Art Gallery
	6.9	Courthouse, Archives Building, Library
	6.10	Aquarium
	6.11	Rapid Transit Station
	6.12	Maximum or Medium Security Detention Centre
	6.13	Airport Passenger Terminal, Bus Passenger Terminal, Rail Passenger Terminal, Seaport / Ferry Passenger Terminal
	6.14	Customs and Immigration Building
7	7.1	Custom Residence, Custom Residential Swimming Pool, Official Government Residence
	7.2	Decorative Work, Exhibition Display, Public Garden, Promenade, Fountain
	7.3	Commemorative Monument, Funeral Monument
	7.4	Air Traffic Control Tower, Control Centre, Flight Service Station
	7.5	Tenant Space Planning
	7.6	Legislative Building, Mint
	7.7	Chancellery and Embassy, Consulate, Foreign Mission

NOTE: Fees for Demolition Projects are based on the percentage fee of the building category for the type of building to be demolished.

NOTE: Due to increased design complexity as a result of changing user requirements, such as security, some building types have been moved to a higher category than indicated in some provincial associations' fee schedules.

3 Definitions

Construction Budget:

The client's budget for the construction cost including contingencies for cost increases. And including taxes GST, etc

Construction Cost:

The contract price(s) of all Project elements designed or specified by, or on behalf of, or as a result of, the coordination by the Architect, including cash allowances, building permit fees, changes, construction management fees or other fees for the coordination and procurement of construction services, and all applicable taxes, including the full amount of value-added taxes, whether recoverable or not. Where there is no contract price for all or part of the Project, the Construction Cost shall be the estimate of probable cost of construction as determined by the Architect, or as agreed by the Architect if a Cost Consultant is engaged, at market rates at the anticipated time of construction. Construction Cost excludes the following:

- the compensation of the Architect and the Consultants,
- other professional fees which are the responsibility of the Client,
- the land cost, and land development charges.

In the event that the Client furnishes labour or material below market cost, or recycled materials are used, the Construction Cost for purposes of establishing the Architect's and Consultants' fees includes the cost of all materials and labour necessary to complete the Work as if all materials had been new and as if all labour had been paid for at market prices at the time of construction or, in the event that the construction does not proceed, at existing market prices at the anticipated time of construction.

Direct Personnel Expense:

The salary of the architect's or architect's consultant's personnel engaged on the project plus the cost of such mandatory and customary contributions and employee benefits as employment taxes and other statutory benefits, insurance, sick leave, holidays, vacations, pensions, and similar contributions and benefits.

Disbursement Record:

A record of billable reimbursable expenses.

Feasibility Study:

A report which outlines the research and subsequent analysis to determine the viability and practicability of a project. A feasibility study analyzes economic, financial, market, regulatory, and technical issues.

Fee: The amount of compensation paid to the architect for the provision of a specific service. (Normally does not include reimbursable expenses or disbursements.)

Field Review / General Review:

Field Review / General Review means review during visits to the Place of the Work (and where applicable, at locations where building components are fabricated for use at the Project site) at intervals appropriate to the stage of the construction that the Architect in its professional discretion, considers necessary to become familiar with the progress and quality of the Work and to determine that the Work is in general conformity with

the construction contract documents, and so report, in writing, to the client, contractor and chief building official.

Fixed Fee or Lump Sum or Stipulated Price:
One stated sum of money for the performance or provision of specific services.

Functional Program:
A written statement which describes various criteria and data for a building project, including design objectives, site requirements and constraints, spatial requirements and relationships, building systems and equipment, and future expandability.

Goods and Services Tax (GST), or Harmonized Sales Tax (HST):
In some provinces, must be collected on all income. The total amount collected is reduced by the amount of GST/HST paid to vendors. The difference due to the government is usually paid quarterly.

Multiplier:
A percentage or figure by which direct payroll expenses of staff (Direct Personnel Expense) are multiplied to cover payroll burden, overhead expenses, and profit.

Office Overhead:
includes rent and utilities, office supplies, computer maintenance, automobile expenses, promotion and advertising, books and subscriptions, annual dues, leasing expenses (except as noted below), postage, delivery services, bank charges, interest charges, business taxes, donations, seminar and training expenses and depreciation. Consultant expenses which are related to architectural services are excluded from overhead but other consultants for services such as legal, accounting, marketing and the like are included in overhead expenses. The purchase or lease of major expenditure items such as automobiles, computers or office renovations are charged as office overhead only to the extent that such expenses can be depreciated in accordance with federal policy.

Per diem:
Allowance or payment for each day.

Percentage Fee:
A method of compensation which links the fee for architectural services to a percentage of the construction cost of the project. The percentage will vary depending on the type of building, the construction value, and the type of construction contract.

Pre-design services:
The architectural services provided prior to the traditional building design services which assist the client in establishing a functional program as well as the project scope, including a financial and scheduling plan.

Project Budget:
The client's estimated total expenditure for the entire project. It includes, but is not limited to, the construction budget, professional fees, costs of land, rights of way, and all other costs to the client for the project.

Provincial sales taxes:
are paid as supplies are purchased and unless such supplies are sold again, PST is not collected or required to be collected by architectural practices.

Retainer:

The first payment to the architect, upon engagement representing a stipend to cover the architects initial work and expenses on the client's behalf. This amount is retained on account against the eventual final billing for services on the project. (Typically the retainer is negotiated and often reflects the value of the first two months of service or one half of the value of the first phase of the commission.)

Service:

Work performed, or the doing of work on behalf of an employer or client; benefit conferred, or exertion made, on behalf of someone; work comprised in whole or in part of labour, advice or supervision.

4 Other References

Provincial Associations of Architects' Schedule of Fees or Tariff of Fees

Architectural Institute of British Columbia. *Tariff of Fees for Architectural Services*. Fourth Edition edition. Revised March 2004.

Alberta Association of Architects and the Association of Professional Engineers, Geologists and Geophysicists of Alberta. *Recommended Conditions of Engagement and Schedule of Professional Fees for Building Projects*. May 1998.

Saskatchewan Association of Architects. *Bylaws of the Saskatchewan Association of Architects*, August 1997. Refer to Bylaws No. 16, 17, 18, 19, 20, 21, 22, 23, 24, and 25.

Manitoba Association of Architects. *Schedule of Suggested Professional Charges*.1990.

Ontario Association of Architects. *A Client's Guide to engaging an Architect in Ontario*. First edition August 2008

Association of Architects in Private Practice of Québec. *Architects' Tariff – The services, responsibilities and fees of the architect*. January 2001.

Architects Association of New Brunswick. *Schedule of Recommended Fees*. March 1, 1993.

Architects Association of Prince Edward Island. *Conditions of Engagement and Suggested Schedule of Minimum Professional Charges*. Latest edition.

Nova Scotia Association of Architects. *Conditions of Engagement and Schedule of Minimum Professional Charges*. Latest edition

Newfoundland Association of Architects. *Schedule of Minimum Fees for Architects and Professional Engineers on Building Projects*. Latest edition.

Appendices

A | Fee Calculation Work Sheet

		FEE ADJUSTMENT FACTOR	COMMENTS
Project Number			
Project Name			
MAJOR BUILDING OCCUPANCIES			
Building Category			
Building Area			
Project Complexity			
Construction Budget			
Method of Project Delivery			
METHODS OF COMPENSATION TO ARCHITECT			
Fee 1 Percentage-based			
Fee 2 Hourly or Per Diem			
Fee 3 Fixed Fee			
SCOPE OF SERVICES			
Pre-Design			
Design			
Construction Documentation			
Bidding and Contract Negotiation			
Contract Administration			
Post-construction			
Facility Management			
OTHER PROJECT VARIABLES			
Construction Schedule / Fast-track			
Project Documentation			
Specialist Consultants			
Approvals			
Submittals			
New Technologies			
Third Party Certification			
Construction Administration			
Location			
Renovation / Vertical Additions			
Repeat Work / Repetitive Design			
Architect's Personnel			
Contingency			
Other			
Total Fee Adjustment Factors			
Adjusted Fees			
Fee 1 Percentage-based			
Fee 2 Hourly or Per Diem			
Fee 3 Fixed Fee			

B Sample Fees using Fee Calculation Work Sheet

		FEE ADJUSTMENT FACTOR	COMMENTS
Project Number	2009-08		
Project Name	Ottawa Valley University Classroom		
MAJOR BUILDING OCCUPANCIES			
Building Category	Category 5		non-technical classroom
Building Area	3000 square metres		
Project Complexity	AVERAGE		
Construction Budget	$9,000,000		
Method of Project Delivery	Construction Management		
METHODS OF COMPENSATION TO ARCHITECT			
Fee 1 Percentage-based	7.05		
Fee 2 Hourly or Per Diem			
Fee 3 Fixed Fee			
SCOPE OF SERVICES			
Pre-Design	n/a		
Design	yes		
Construction Documentation	yes		
Bidding and Contract Negotiation	yes		
Contract Administration	yes		
Post-construction	additional		
Facility Management	additional		
OTHER PROJECT VARIABLES			
Construction Schedule / Fast-track	no		
Project Documentation	multiple tender packages	plus 0.25	Construction Document Phase additional cost of 50%
Specialist Consultants	cost consultant		separate fee for Cost Consultant
Approvals	normal		
Submittals	normal		
New Technologies	green roof	plus 0.10	
Third Party Certification	LEED certification	plus 0.10	additional energy analysis and documentation
Construction Administration	normal		
Location	normal		
Renovation / Vertical Additions	no		
Repeat Work / Repetitive Design	no		
Architect's Personnel	no additonal personnel required		
Contingency			
Other			
Total Fee Adjustment Factors		1.45	
Adjusted Fees	7.05 x 1.45 = 10.22	**10.22**	total fee approximately $919,800
Fee 1 Percentage-based			
Fee 2 Hourly or Per Diem			for additional services only
Fee 3 Fixed Fee			addtional 9,000 for Cost Consultant

C Typical Invoice using Percentage-based fee

To: Acme Co. Ltd.
77 Skyway Drive
Anytown, ON
Y2K 2Y2

INVOICE No.: 8094
Project: Acme Office Addition
Project No.: 8051
Date: 16 October 2008
GST No.: R109976007

For Professional Services Rendered:

Reference: Client-Architect Agreement
Document Six, dated May 29, 2008

Fees to: 15 October 2008

Earned to date:

Design	100% of 25% of 8% of $200,000	$4,000.00
Contract Documents	100% of 50% of 8% of $220,000	$8,800.00
Contract Administration Services	60% of 25% of 8% of $241,820	$2,901.84

Additional Services

Change Orders 1, 2, and 3	6 hours @ $120/hour	$720.00
	15 hours @ $60/hour	$900.00
		$1,620.00

Total fee earned to date	$17,321.84
Less previously invoiced	$16,084.76
TOTAL FEE DUE THIS INVOICE	$1,237.08

Reimbursable expenses due (excluding GST) $104.60
(see Schedule A attached)

Sub-total	$1,341.68
GST	$93.92
TOTAL DUE THIS INVOICE	**$1,435.60**

D Alphabetical List of Buildings by Category

Administrative Office Building, **excluding** tenant layouts	3
Agricultural Building (Specialized)	3
Air Traffic Control Tower	7
Aircraft Hangar	5
Airport Passenger Terminal	6
Alterations	7
Ambulance Facility	4
Amusement Park Building	5
Animal Clinic	4
Animal Hospital	5
Animal Shelter	1
Apartment	2
Aquarium	6
Archives Building	6
Armed Forces Base, Armoury	3
Art Gallery	6
Auditorium	5
Barn	1
Botanical Gardens	5
Bowling Alley	3
Bus Passenger Terminal	6
Car Dealership	3
Cemetary Chapel	5
Chancellery	7
Chronic Care Facility	6
Church	5
City Hall	5
Club: Town Country	4
Commemorative Monument	7
Communications Building	6
Community Centre	4
Computer Centre	6
Concert Hall	5
Consulate	7
Convent	5
Convention Hall	4
Courthouse	6
Crematorium	5
Custom Residence	7
Custom Residential Swimming Pool	7
Customs and Immigration Building	6
Dairy and Creamery	4
Dance Hall	3
Decorative Work	7
Dental Building	6
Distillery	4
Dormitory	2
Drill Hall	3
Drycleaning Establishment	4
Embassy	7
Emergency Operations Center	5
Exhibition Building	4
Exhibition Display	7
Facility for High-level Medical Care for active diagnostic and acute treatment	6
Financial Customer Service Centre (such as Bank Branches)	4
Fire Station	4
Flight Service Station	7
Foreign Mission	7
Fountain	7
Freight Handling Terminal	5
Funeral Home	5
Funeral Monument	7
Grandstand	4
Gymnasium	5
Hotel	4
Housing – Specialized Housing including high-level residential support	4
Housing – Multiple Unit Residential Building (Apartment, Condominium, Dormitory, Townhouse, etc.)	2
House – Custom Residence	7
Ice Arena	5
Industrial Building (such as light manufacturing)	3
Junior, Middle and Senior High School	4
Kennel	1
Kindergarten and Elementary School	3
Laboratory	6
Laundry	4

D Alphabetical List of Buildings by Category

Legislative Building	7
Library	6
Licensed Beverage Establishment	5
Licensed Day Care	5
Long Term Care Facility	5
Maintenance Building	3
Manufacturing	4
Marina	3
Mausoleum	5
Maximum or Medium Security Detention Centre	6
Medical Research Facility	6
Mental Health Facility and Rehabilitation Facility	6
Mercantile Buildings for Business and Personal Services including Store, Shop, Barber and Hairdressing Shop Supermarket, Shopping Centre, Department Store, but **excluding** tenant layouts	3
Minimum Security Detention Facility	5
Mint	7
Monastery	5
Motel and Apartment Hotel	3
Multiple Unit Residential Building (Apartment, Condominium, Dormitory, Townhouse, etc.)	2
Museum	6
Museum (exhibition hall as shell, non-complex program without environmental conditions)	5
Observatory	6
Official Government Residence	7
Opera House	5
Park Building	2
Parking Structure (Freestanding)	4
Pedestrian Links and Bridges	5
Physical Education Building	5
Place of Worship	5
Planetarium	6
Police Station	4
Post Office	4
Processing or Specialized Storage Facility	4
Promenade	7
Public Garden	7
Radio or TV Facility	6
Rail Passenger Terminal	6
Rapid Transit Station	6
Recreation Building	5
Recreational Pier	3
Resort Building (Building Shell only)	2
Restaurant	5
Restoration of Historic Monument or Building	7
Retirement Facility	4
School – Junior, Middle and Senior High School	4
School – Kindergarten and Elementary School	3
Science Building	6
Seaport / Ferry Passenger Terminal	6
Secure Server Building	5
Self-service Storage Building	1
Senior Citizens' Apartment	3
Service Garage	3
Service Station	3
Shed	1
Shelter for Homeless	4
Shelter for Women	4
Special Care Facility such as a Group Home	5
Special Maintenance Garage	5
Specialized Housing including high-level residential support	4
Stable	1
Stadium	4
Storage building	1
Student or Institutional Residence	3
Studio	6
Summer Camp	2
Swimming Pool	5
Telephone Equipment Building	5
Tenant Space Planning	7
Theatre	5
Town Hall	5
TV Facility	6
University or College	5
Warehouse	1
Zoo	5

E | Services of the Architect

The following describes the "traditional" and basic services of the Architect:

1.0 Architect's Services

1.1 The *Architect*'s services consist of those services performed by the *Architect*, the *Architect*'s employees, and the *Architect*'s *Consultants* set forth herein and any other services included in Article A.18. They include the provision of normal structural, mechanical and electrical engineering services by professional engineers when these *Consultants* are engaged by the *Architect*.

1.2 The *Architect*'s services include *Consultant Coordination* required to integrate all parts of the services.

2.0 Schematic Design Phase

The *Architect* shall:

2.1 review the program of requirements furnished by the Client and characteristics of the site;

2.2 review and comment on the Client's *Construction Budget* in relation to the Client's program of requirements;

2.3 review with the Client alternative approaches to the design of the *Project* and the types of construction contracts;

2.4 review applicable statutes, regulations, codes and by-laws and where necessary review the same with the Authorities Having Jurisdiction;

2.5 based on the mutually agreed upon program of requirements, schedule and *Construction Budget*, prepare for the Client's review and approval, schematic design documents to illustrate the scale and character of the *Project* and how the parts of the *Project* functionally relate to each other; and

2.6 prepare and submit to the Client an estimate of probable *Construction Cost* based on current area or volume unit costs.

3.0 Design Development Phase

Based on Client approved schematic design documents and agreed estimate of probable *Construction Cost*, the *Architect* shall:

3.1 prepare for the Client's review and approval, design development documents consisting of drawings and other documents appropriate to the size of the *Project*, to describe the size and character of the entire *Project* including the architectural, structural, mechanical, and electrical systems, materials and such other elements as may be appropriate;

3.2 prepare and submit to the Client for approval a revised estimate of probable *Construction Cost*, and

3.3 continue to review applicable statutes, regulations, codes and by laws as the design of the *Project* is developed.

4.0 *Construction Documents* Phase

Based on the Client approved design development documents and agreed estimate of probable *Construction Cost*, the *Architect* shall:

4.1 prepare, for the Client's review and approval, *Construction Documents* consisting of drawings and specifications setting forth in detail the requirements for the construction of the *Project*

4.2 advise the Client of any adjustments to the estimate of probable *Construction Cost*, including adjustments indicated by changes in requirements and general market conditions;

4.3 obtain instructions from and advise the Client on the preparation of the necessary bidding information, bidding forms, conditions of the contract and the form of contract between the Client and the contractor; and

4.4 review statutes, regulations, codes and by-laws applicable to the design and where necessary review the same with the Authorities Having Jurisdiction in order that the Client may apply for and obtain the consents, approvals, licences and permits necessary for the *Project*.

5.0 Bidding or Negotiation Phase

5.1 Following the Client's approval of the *Construction Documents* and the latest estimate of probable *Construction Cost*, the *Architect* shall assist and advise the Client in obtaining bids or negotiated proposals and in awarding and preparing contracts for construction.

6.0 Construction Phase – Contract Administration

6.1 The extent of the duties, responsibilities and limitations of authority of the *Architect* as the Client's representative during construction shall be modified or extended only with the written consent of the Client and the *Architect*.

6.2 During the construction phase – contract administration, the *Architect* shall:

.1 be a representative of the Client;

.2 advise and consult with the Client;

.3 have the authority to act on the Client's behalf to the extent provided in this contract and the construction contract documents;

.4 have access to the *Work* at all times wherever it is in preparation or progress;

.5 forward all instructions from the Client to the contractor;

.6 carry out the *Field Review / General Review* of the *Work*;

.7 examine, evaluate and report to the Client upon representative samples of the *Work*;

.8 keep the Client informed of the progress and quality of the *Work*, and report to the Client defects and deficiencies in the *Work* observed during the course of the site reviews;

.9 determine the amounts owing to the contractor under the construction contract based on the *Architect*'s observations and evaluation of the contractor's application(s) for payment;

.10 issue certificates for payment in the value proportionate to the amount of the construction contract, of *Work* performed and products delivered to the *Place of the Work*;

.11 in the first instance, interpret the requirements of the construction contract documents and make findings as to the performance thereunder by both the Client and contractor;

.12 render interpretations in written and graphic form as may be required with reasonable promptness on the written request of either the Client or the contractor.

.13 render written findings within a reasonable time, on all claims, disputes and other matters in question between the Client and the contractor relating to the execution or performance of the *Work* or the interpretation of the construction contract documents;

.14 render interpretations and findings consistent with the intent of and reasonably inferable from the construction contract documents; showing partiality to neither the Client nor the contractor; but shall not be liable for the result of any interpretation or finding rendered in good faith in such capacity;

.15 have the authority to reject *Work* which does not conform to the construction contract documents, and whenever, in the *Architect*'s opinion, it is necessary or advisable for the implementation of the intent of the construction contract documents, have the authority to require special inspection or testing of *Work*, whether or not such *Work* has been fabricated, installed or completed;

.16 review and take other appropriate action with reasonable promptness upon such contractor's submittals as shop drawings, product data, and samples, for conformance with the general design concept of the *Work* as provided in the construction contract documents;

.17 prepare change orders and change directives for the Client's approval and signature in accordance with the construction contract documents;

.18 have the authority to order minor adjustments in the *Work* which are consistent with the intent of the construction contract documents, when these do not involve an adjustment in the contract price or an extension of the contract time;

.19 furnish supplemental instructions to the contractor with reasonable promptness or in accordance with a schedule for such instructions agreed to by the *Architect* and the contractor;

.20 determine the date of *Substantial Performance of the Work*;

.21 receive from the contractor and forward to the Client for the Client's review the written warranties and related documents;

.22 verify the validity of the contractor's application for final payment and issue a certificate of final payment; and

.23 prior to the end of the period of one year following the date of *Substantial Performance of the Work*, review any defects or deficiencies which have been reported or observed during that period, and notify the contractor in writing of those items requiring attention by the contractor to complete the *Work* in accordance with the construction contract.

7.0 *Construction Budget* and Estimate of Probable *Construction Cost*

7.1 The *Architect* shall review and comment on the Client's *Construction Budget* and shall prepare the estimate of probable *Construction Cost* as set out in this contract.

F List of Supplemental Architectural Services

The following is a list of some of the specialized services offered by architectural practices or coordinated with special consultants.

PRE-DESIGN SERVICES

- Facilities Programming
- Feasibility Studies
- Existing Site and Facilities Analysis
- Traffic and Parking Studies
- Existing Equipment and Furniture Inventories
- Energy Analysis
- Master Programming and Planning
- Environmental Studies
- Space Schematics/Flow Diagrams
- Marketing Studies
- Financial Analysis
- Project Financing
- Advisor for Architectural Competitions
- Preparation of Proposal Call Documents

POST-CONSTRUCTION SERVICES

- Commissioning Services
- Post-occupancy Studies
- Maintenance and Operational Programming
- Building Maintenance Manuals
- Post-occupancy Evaluation

SITE DEVELOPMENT SERVICES

- Site Analysis and Selection
- Site Development Planning / Site Plan Agreement
- Detailed Site Utilization Studies
- On-site Utility Studies
- Off-site Utility Studies
- Environmental Studies and Reports
- Zoning and Land Use Amendments
- Geotechnical Engineering
- Site Surveying
- Legal Survey
- Landscape Design

MATERIALS AND SYSTEMS TESTING

- Procurement of Testing Services
- Review and Analysis of Testing

INTERIOR DESIGN AND DESIGN SERVICES

- Space Planning
- Adaption of Mechanical and Electrical Systems and other Systems to Tenant Needs
- Preparation of Furnishing Requirements
- Bidding or Purchasing Procedures for Furniture
- Furniture and Equipment Selection and Layout
- Special Furnishings Design
- Tenant-related Services
- Interior Partition Location
- Furniture and Finishing Specifications
- Selection of Interior Materials, Finishes, and Colours
- Procurement of Furniture
- Coordination of Installation and Delivery of Furniture
- Design of Interior and Exterior Signage and Symbols
- Selection or Acquisition of Fine Arts or Crafts
- Graphic Design
- Documentation of Requirements and Procurement of Graphics Work

PROJECT ADMINISTRATION AND CONSTRUCTION MANAGEMENT SERVICES

- Project Administration
- Disciplines Coordination/Document Checking
- Consulting with and Review and Approval of Authorities
- Submittal Services
- Owner-supplied Data Coordination
- Schedule Development/Monitoring
- Testing and Inspection Administration
- Project Representation
- Supplemental Documentation
- Administration of Multiple Contracts
- Detailed Cost Estimates and Quantity Surveys
- Value Analysis or Value Engineering
- Life Cycle Cost Analysis
- Coordination of Mock-ups
- Facility Management

PROMOTION AND PUBLIC RELATIONS

- Preparation of Press Releases
- Preparation of Promotional Brochures
- Presentations at Public Meetings
- Preparation of Leasing Material
- Preparation of Models
- Preparation of Renderings
- Condominium Documentation
- Computer Presentations

DOCUMENTATION SERVICES

- Preparation of Special Certificates and Letters of Assurance
- Certified Area Calculations
- As-Built Drawings and Computer Files
- Preparation of Measured Drawings
- Building Inspection and Reporting
- Aerial Site Photography
- Still Photography of Existing Conditions
- Periscope Photography of Models
- Presentation Photography of Renderings or Models
- Construction Progress Photographs
- Architectural Photography of Completed Building or Site
- Videotaping
- Computer Database
- Inventories of Materials, Equipment or Furnishings

ARCHITECTURAL CONSERVATION

- Historic Building Documentation
- Heritage Conservation District Studies
- Conservation Reports

EXPERT WITNESS

- Testimony at Court or Hearing
- Opinion on Codes or Regulations

COMPUTER APPLICATIONS

- Computer Renderings
- 3-D Computer Presentations and Walk-throughs
- Electronic Communication and Distribution
- Computer Analysis and Mock-ups
- Project Scheduling
- Project Accounting

URBAN DESIGN

- Streetscape Design
- Drafting of Zoning Bylaws and Regulations
- Shadow Studies
- Urban Design Studies
- Wind Studies
- Land Use Studies
- Transportation Studies

RESEARCH

- Research in Construction Materials and Methods
- Building Envelope Investigation

G List of Types of Consultants on the Design Team

SPECIALIST CONSULTANTS:

- Acoustical consultant
- Airport consultant
- Architectural historian
- Art consultant
- Building code consultant
- Building envelope consultant
- Computer or CAD consultant
- Conservation or heritage architect
- Construction manager
- Cost consultant
- Demographer
- Economist
- Education consultant
- Elevator consultant
- Energy management consultant
- Environmental consultant or ecologist
- Facilitator
- Facilities manager
- Food service/kitchen consultant
- Graphic artist
- Hardware consultant
- Hospital consultant
- Information technology consultant
- Interior designer
- Laboratory consultant
- Land surveyor
- Landscape architect
- Lighting consultant
- Marketing consultant
- Programmer
- Psychologist
- Public relations consultant
- Quantity Surveyor
- Realtor
- Scheduling consultant
- Security consultant
- Signage or graphics consultant
- Sociologist
- Specifications writer
- Technologist
- Theatre consultant
- Translator
- Transportation planner
- Urban and regional planner
- Urban designer
- Value engineering consultant
- Wayfinding consultant
- Wind/snow studies consultant

ENGINEERING CONSULTANTS:

- Acoustical engineer
- Civil engineer
- Electrical engineer
- Environmental engineer
- Geotechnical engineer
- Hydrological engineer
- Mechanical engineer
- Process engineer
- Seismic engineer
- Structural engineer
- Traffic engineer

H | Finding, Selecting and Engaging an Architect

Selecting the right Architect is one of the most significant decisions you can make on a building project.

1 | How to Find an Architect

You can find an architect in a number of ways, including:

- Use the RAIC Electronic online Member Directory, called "Find an Architect".
- Request and review a copy of the RAIC Directory, or, if available, obtain a provincial association directory which is produced by some of the provincial associations of architects.
- Visit architects' websites.
- Use your own experience to nominate architects that have served you well in the past.
- Ask for recommendations from other organizations or persons who may have had similar projects.
- Advertise in a local or province-wide publication, such as the RAIC electronic Bulletin or a provincial association's newsletter or website. If you choose to advertise, you can use the suggested wording shown in the sample advertisement on the RAIC website.

You will find the process easier if you keep the list of potential architects to a manageable number. For a small project, two architects may be sufficient; ten or more may be appropriate for a large, complicated assignment.

2 | How to Select an Architect

There are three methods for selecting an architect:

- Qualifications or Quality-Based Selection
- Direct Selection
- Architectural Design Competition

2.1 | Qualifications Based Selection or Quality Based Selection (QBS)

More information on QBS and also be found on the RAIC website at:
www.raic.org/architecture_architects/choosing_an_architect/qbs_e.htm

A Guide, Selecting a Professional Consultant, may be found at:
www.sustainablecommunities.fcm.ca/files/Infraguide/Decision_Making_Investment_Planning/Selecting_Profess_Consultant.pdf

Finally, the Canadian Handbook of Practice for Architects includes a detailed Checklist and Guidelines for Issuing Requests for Proposals at the end of Chapter 1.2.2 – The Client.

2.2 | Direct Selection

There are many good reasons why a client might select an Architect directly, often because of referral from a previous client or the more public reputation of that Architect.

Architects are aware of the importance of their reputation, both on a project-specific basis and on a broader public level. Most clients rely on either formal or informal references to confirm that they are selecting the best Architect for the project at hand.

More information on direct selection can be found on the RAIC website at:
www.raic.org/architecture_architects/choosing_an_architect/index_e.htm

2.3 | Architectural Design Competitions

Architectural Design Competitions are appropriate when an owner wishes to create a public dialogue about Architecture or where a sponsor is seeking design solutions that are very different, one from the other. More information on Architectural competitions can be found on the RAIC website at:
www.raic.org/architecture_architects/architectural_competitions/index_e.htm

3 | How to Engage an Architect – A clear and written Agreement is essential!

The services of an Architect are rendered most effectively when a clear understanding exists between the Client and the Architect and is incorporated into a written contractual agreement. This understanding is most effectively accomplished by a thorough clear discussion and conclusion as to:

- the scope of the services to be provided by the Architect;
    - the scope of services provided by subconsulting Engineers and specialists to be engaged by the Architect
    - the role of the Architect with respect to project coordination and any subcontracts with other Consultants;
    - The role of the Architect relative to the monitoring of construction;
- professional responsibility and liability;
- project timelines;
- the method of establishing of the architect's fees; and
- the method of payment for the architect's services.

When a Client and Architect have fully discussed and agreed upon these items, a written contract outlining all of these terms should be prepared.

The following are among many variables that will influence the level of effort needed to provide full Architectural services for a given project:

3.1 | Project Coordination

Coordination of the consultant team is critical to the successful completion of any building project. And, this coordination is usually undertaken by the Architect. Often the Architect is appointed as the prime consultant.

3.1.1 | Prime Consultant

The prime consultant not only manages and coordinates the design and administration of the project but also ensures that all members of the consultant team are properly informed of, and fulfill, their responsibilities. These coordinating duties must be compensated fairly as they are of considerable value to the Owner.

3.1.2 | Subconsultants

Subconsultants are usually retained by the Architect but they may be engaged and retained by the Client or Owner. Basic engineering consultants are structural, mechanical and electrical engineers. It is possible to establish the Architect's fee in one of two ways:

1) including the fees of the three basic engineering consultants, or
2) without the basic engineering fee.

3.1.3 | Specialist Consultants

Today there is an increasing demand for new specialist consultants. It should be noted that specialist consultants are **not** part of the basic services of the Architect. Some of these specialist consultants are:

- fire protection consultants,
- life safety and code consultants,
- security consultants,
- building envelope consultants,
- information technology specialists.

All of these are in addition to many of the traditional consultants, such as food service consultants and interior designers.

Refer to Appendix F for a complete list of possible subconsultants.

The Architect typically coordinates the specialist and subconsultants whether or not they have been retained directly by the Architect or by the Owner. Compensation for this coordinating role is sometimes called a coordination fee and the amount varies depending on:

- the complexity of the project,
- the subconsultant's discipline or field of expertise, and
- the magnitude of the coordination activity.

Often the coordination fee is approximately 25%-35% of the subconsultant's fee. The fee for the services of specialist consultants is always over and above the fee or normal percentage for the Architect's services.

3.2 | Scope of Services

As indicated above the scope of services must be agreed upon and the purpose of this document is to determine an appropriate fee for the Architect's services. The following chart provides a simple checklist for the Architect and Client to review typical services for a normal building project.

Checklist: Scope of Services

This chart is a typical checklist of services offered by the architect and his or her sub-consultants.
The nature of the individual project and the services customized to the client's needs will determine the scope of services required.A

Project Inception	*Project Assessment*	*Concept Approval*	*Approvals from Authorities*	*Awards of Construction Contract*		*Substantial Performance of Construction/Occupancy Permit*
1.0 PRE-DESIGN	**2.0** SCHEMATIC DESIGN	**3.0** DESIGN DEVELOPMENT	**4.0** CONSTRUCTION DOCUMENTS	**5.0** BIDDING OR NEGOTIATION	**6.0** CONSTRUCTION — CONTRACT ADMINISTRATION	**7.0** POST-CONSTRUCTION
ARCHITECT'S SERVICES ○ Facility Programming ○ Space Relationships/ Flow Diagrams ○ Project Development Scheduling ○ Project Budgeting ○ Life Cycle Cost Studies ○ Economic Feasibility Studies ○ Agency Consulting/ Review/Approval ○ Site Selection/Analysis Utilization ○ Environmental Studies ○ Energy Studies ○ Existing Facilities Surveys ○ Client-Supplied DataCoordination ○ Services Related to Project Management ○ Presentations ○ Marketing Studies ○ Project Financing ○ Special Studies ○ Re-Zoning Assistance ○ Project Promotion SPECIAL CONSULTANTS' SERVICES ○ Legal Survey ○ Geotechnical Analysis	ARCHITECT'S SERVICES ○ Client-supplied Data Coordination ○ Program and Budget Evaluation ○ Review of Alternative Design Approaches ○ Architectural SchematicDesign ○ Schematic Design Drawings and Documents ○ Statement of Probable Construction Costs ○ Client Consultation ○ Interior Design Concepts ○ Special Studies (Future Facilities, Environmental Impact, etc.) ○ Special Submissions or Promotional Presentations ○ Special Models, Perspectives or Computer Presentations ○ Project Management ○ Agency Consultation CONSULTANTS' SERVICES ○ Structural Design Concepts ○ Mechanical Design Concepts ○ Electrical Design Concepts ○ Statements of Probable Costs SPECIAL CONSULTANTS' SERVICES ○ Civil Design Concepts ○ Landscape Concepts ○ Statements of Probable Costs	ARCHITECT'S SERVICES ○ Client-supplied Data Coordination ○ Design Coordination ○ Architectural Design Development ○ Design Development Drawings and Documents ○ Statement of Probable Construction Costs ○ Client Consultation ○ Interior Design Development ○ Special Studies/Reports (Planning Tenant or Rental Spaces, etc.) ○ Promotional Presentations ○ Models, Perspectives or Computer Presentations ○ Project Management ○ Agency Consultation CONSULTANTS' SERVICES ○ Structural Design Development ○ Mechanical Design Development ○ Electrical Design Development ○ Statements of Probable Costs SPECIAL CONSULTANTS' SERVICES ○ Civil Engineering Design Development ○ Landscape Development ○ Detailed Construction Cost Estimates or Quantity Surveys	ARCHITECT'S SERVICES ○ Client-supplied Data Coordination ○ Project Coordination ○ Architectural Construction Documents (Working Drawings, Form of Construction Contract and Specifications) ○ Document Checking and Coordination ○ Statement of Probable Construction Costs ○ Client Consultation ○ Interior Construction Documents ○ Alternative Bid Details and Special Bid Documents ○ Project Management ○ Agency Consultation CONSULTANTS' SERVICES ○ Structural Construction Documents ○ Mechanical Construction Documents ○ Electrical Construction Documents ○ Statements of Probable Costs SPECIAL CONSULTANTS' SERVICES ○ Civil Engineering Construction Documents ○ Landscape Documents ○ Detailed Construction Cost Estimates or Quantity Surveys	ARCHITECT'S SERVICES ○ Client-supplied Data Coordination ○ Project Coordination ○ Issue Bidding Documents ○ Issue Addenda ○ Bid Evaluation ○ Construction Contract ○ Client Consultation ○ Separate Bids or Negotiated Bids ○ Services Related to Bidders' Proposals ○ Project Management CONSULTANTS' SERVICES ○ Issue Bidding Documents ○ Issue Addenda ○ Bid Evaluation SPECIAL CONSULTANTS' SERVICES ○ Issue Bidding Documents ○ Issue Addenda ○ Bid Evaluation	ARCHITECT'S SERVICES ○ Construction Review ○ Progress Reports/ Evaluation ○ Process Certificates for Payment ○ Interpretation of Contract Documents ○ Review of Shop Drawing Product Data/Sample ○ Change Orders ○ Substantial Performance Report and Certification ○ Client Consultation ○ Interior Construction Inspection ○ Full-time Project Representation ○ Administration of Separate Contracts ○ Project Management ○ Promotional Material ○ Record Drawings ○ Agency Consultation CONSULTANTS' SERVICES ○ Structural Inspection/ Reports ○ Mechanical Inspection/ Reports ○ Electrical Inspection/ Reports ○ Record Drawings ○ Certification of Progress SPECIAL CONSULTANTS' SERVICES ○ Civil Construction Inspection ○ Landscape Inspection ○ Detailed Cost Accounting	ARCHITECT'S SERVICES ○ Field Review ○ Deficiency Assessment ○ Instructions for Correction of Deficiencies ○ Review of Warranties ○ Total Performance Inspection and Certification ○ Client Consultation ○ Start-up Assistance ○ One-year Warranty Inspections OTHER SERVICES ○ Fine Arts/Crafts/ Graphics ○ Non-building Equipment Selection ○ Building Analysis and Reports ○ Services Related to Alterations and Demolition ○ Life Cycle Cost Monitoring ○ Environmental Monitoring ○ One-year Warranty Inspections CONSULTANTS' SERVICES ○ Start-up Assistance ○ Systems Performance Review ○ Non-building Equipment Selection ○ Life Cycle Cost Monitoring ○ Services related to Alterations and Demolition

If the Client and Architect agree to eliminate some services or add additional services the fee must be adjusted accordingly.

Refer to Appendix F for a list of other services that Architects provide.

3.3 | Client's Responsibilities

The written contract or agreement sets out the services to be provided by the Architect. They also identify the Client's responsibility to provide information, such as:

- the requirements for the project under consideration;
- usually physical specifications (such as spatial and functional relationships) or functional program;
- legal services;
- site conditions (such as surveys, subsurface investigation reports, designated substances and mould, etc.); and
- the schedule for payment of fees.

The use of the *RAIC Document Six: Canadian Standard Form of Contract Between Client and Architect* or other endorsed standard contract documents is always recommended.