Guidelines for Risk Management in Construction

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Background

The Health Care Protection Program (HCPP) is housed within the Risk Management Branch (RMB) of the Ministry of Finance. RMB is the central agency responsible for providing risk management and insurance advice to BC ministries and the broader provincial public sector including all the Health Care Agencies (HCAs). RMB is also the home of the Provincial Construction Insurance Program wherein all HCAs are required to place their construction insurance on all projects valued at $1,000,000.00 or greater. HCPP consults on all P3 health projects providing insurance, indemnity and risk management advice. The consultants at HCPP are professionals in construction insurance and can provide the HCAs with risk management advice on a wide range of construction related topics. Our consultants regularly collaborate and share information, providing us access to a broader knowledge base on issues related to insurance and construction risks.

Capital Asset Management Framework

HCAs are reminded that all public sector agencies are responsible for acquiring and managing their own capital construction and complying with government's capital policy as described in the BC Government Capital Asset Management Framework (CAMF) located at: http://www.fin.gov.bc.ca/tbs/camf.htm).

In reference to risk management under CAMF, all HCAs are required to ensure they apply due diligence and develop processes to:

1. assess the overall risk and complexity associated with each project, throughout its life cycle;
2. assess risk in the earliest stages of planning, when only rudimentary estimates of costs and impacts may be available; and
3. continually review and update risk assessments at every stage of a project's life cycle, adjusting levels of due diligence as needed.

Capital Construction Procurement Checklist

Under CAMF, The Ministry of Finance also published the Capital Construction Procurement Checklist which provides that, as part of an overall audit process, the preparation of construction contracts must adequately reflect selected risk allocation. Criteria include using appropriate standard insurance, indemnity and bonding language that is approved by Risk Management Branch (RMB) of the Ministry of Finance or, if not, revisions are approved by RMB. The forms in our Construction Program Bulletin meet these criteria and are approved by RMB.

Facility Life Cycle

According to CAMF a facility's life cycle is Planning (identification of baseline supply and demand information (e.g., inventory information), service delivery options and business case analysis), Implementation (acquisition, or design and construction), Operations (asset in use and related service delivery, including renovations) and Renewal or Disposal (end of an asset's useful life). It is important to understand that risks during the design, construction, renovations or demolition phases of a facility are different than those during an HCA's normal operations period.

HCPP covers HCAs for their property and liability risks during their normal operations and this includes if an HCA, or their staff, decide to undertake a construction project on their own. Should an independent contractor be used on any construction projects; however, there are many risks that the HCA needs to be concerned about. HCAs can protect themselves from contractor risks in many ways including using the appropriate construction contracts specific to a project or service and ensuring there are contractor warranties, indemnities, appropriate insurance requirements, contract security (bonds), etc. are in place within these contracts. These and other discussions about construction risks are covered in more detail below.

Construction Contract Risks

HCAs regularly enter contracts with independent contractors or professionals during the design, construction, renovations or demolition periods for a variety of reasons including the HCA may be short staffed, the work may be very specialized or the project is very large. Within these construction contracts there are risk transfer clauses which include indemnity, limitation of liability and insurance. To ensure appropriate risk transfer, the HCA must review these clauses carefully before entering into an agreement. **HCPP, in accordance with the Provincial Construction Insurance Program, has provided supplementary insurance and indemnity language available in our** Construction Program Bulletin **for the most standard construction contracts (including the Canadian Construction Document Committee (CCDC) Stipulated Price Contract - the CCDC 2 2008).** These clauses were extensively negotiated with the Province (represented by RMB), Owners (including HCAs), the Public Construction Council of British Columbia (PCCBC), and the Architectural Institute of British Columbia (AIBC) under a provincial working group. All the parties with their representing counsel **agreed to these supplementary conditions; therefore, they should not be considered negotiable**. If a party to a contract attempts to negotiate the CCDC 2 2008 insurance and indemnity clauses, it is best to advise them to contact their representing professional body.

Below is a table outlining the standard construction contracts that HCAs often enter. The table is organized according to the project's lifecycle stage and includes the common construction models, the recommended contract, the common associated risks, risk transfer clauses and any available supplementary insurance, bonds and indemnity language. These common construction contracts are available to the HCAs at the end of this document under the Other related Links section.

Project Life Cycle Phase Under CAMF	Common Construction Models	Recommended Contract	Common Risks	Risk Transfer Clauses	Available Supplementary Insurance, Bonds and Indemnity Language
Building Design (Implementation Phase under CAMF)	Building Design by Professional **Architect** hired by HCA (Contract or insurance not required if an HCA employee)	AIBC Contract 6C or RAIC 6 2006 or 2002	• Error in design • Third Party bodily injury or property damage • HCA bodily injury or property damage	• Indemnity • Insurance • Limitation of Liability	✓ HCPP Construction Program Bulletin (Project Managers must contact their HCA Risk Leads to get access approval to download this document)
Building Design (Implementation Phase under CAMF)	Building Design by Professional **Architect** hired by HCA (Contract or insurance not required if an HCA employee) Used for non-comprehensive projects such as reports or to initiate services with the intent to enter a more comprehensive AIBC Contract 6C or RAIC 6 2006 or 2002	AIBC DOCUMENT 8C - 2010 Standard Short Form or RAIC Short Form DOCUMENT EIGHT - 2007	• Error in design • Third Party bodily injury or property damage • HCA bodily injury or property damage	• Indemnity • Insurance • Limitation of Liability	Contact HCPP
Construction (Implementation Phase under CAMF)	**Engineer** Professional Services hired by HCA (Contract or insurance not required if an HCA employee)	ACEC Document no. 31 - 2009	• Error in advice • Third Party bodily injury or property damage • HCA bodily injury or property damage	• Indemnity • Insurance • Limitation of Liability	Contact HCPP
Construction (Implementation Phase under CAMF)	Independent **Project Manager** hired by HCA (Contract or insurance is not required if an employee of an HCA)	General Services Agreement (GSA) (HCA or BC Government**)**	• Third Party bodily injury or property damage • HCA bodily injury or property damage • Business (e.g. contractor stops mid contract) • When applicable, professional error in design or advice	• Indemnity • Insurance	✓ HCPP GSA Insurance Matrix (Project Managers must contact their HCA Risk Leads to get access approval to download this document)
Maintenance or Small Renovations (Operation Phase under CAMF)	**Renovation** or small construction projects including maintenance undertaken **by contractors** (e.g. projects under $250,000.00)	General Services Agreement (GSA) (HCA or BC Government**)**	• Third Party bodily injury or property damage • HCA bodily injury or property damage • Products and completed operations • Possible pollution • Business (e.g. contractor stops mid contract)	• Indemnity • Insurance	✓ Insurance Clauses (to be included in the BC Government General Services Agreement (GSA) adopted for use by Health Care Agencies for Construction Projects with an estimated valued of less than $250,000.00)
Construction (Implementation Phase under CAMF) **or** **Moderate to Substantial Renovations** (Operation Phase under CAMF)	Building **construction Bid Build** (e.g. projects $250,000.00 or over)	CCDC 2 2008	• HCA property • Third Party bodily injury or property damage • HCA bodily injury or property damage • Products and completed operations • Possible pollution • Business (e.g. contractor stops mid contract)	• Indemnity • Insurance • Bonds • Limitation of Liability	✓ HCPP Construction Program Bulletin (Project Managers must contact their HCA Risk Leads to get access approval to download this document)

Project Life Cycle Phase Under CAMF	Common Construction Models	Recommended Contract	Common Risks	Risk Transfer Clauses	Available Supplementary Insurance, Bonds and Indemnity Language
Design and Construction (Implementation Phase under CAMF)	Building design and construction **Design-Build** (e.g. projects $1,000,000.00 or over where **contractor** designs and builds facility)	Design- Build Contract 14 (Contractor hires professional consultant to design under Contract 15)	• Error in design • HCA property • Third Party bodily injury or property damage • HCA bodily injury or property damage • Products and completed operations • Possible pollution • Business (e.g. contractor stops mid contract)	• Indemnity • Insurance • Bonds • Limitation of Liability	✓ HCPP Design-Build Insurance and Indemnity Supplementary Conditions
Construction (Implementation Phase under CAMF) **or** **Renovations** (Operation Phase under CAMF)	Professional **Quantity Surveyor (PQS)** services to HCA for trade and material market advice	General Services Agreement (GSA) (HCA or BC Government**)**	• Error in advice • Third Party bodily injury or property damage • HCA bodily injury or property damage • Business (e.g. contractor stops mid contract)	• Indemnity • Insurance	✓ HCPP GSA Insurance Matrix (Project Managers must contact their HCA Risk Leads to get access approval to download this document)
Construction (Implementation Phase under CAMF) **or** **Renovations** (Operation Phase under CAMF)	**Construction Manager (Agent role only)** Hired for services to Owner for trade and material market advice	CCDC 5A Construction Management Contract for Services ***(CCDC 5A and CCDC 17 are complimentary documents)***	• Third Party bodily injury or property damage • HCA bodily injury or property damage • Business (e.g. contractor stops mid contract)	• Indemnity • Insurance • Limitation of Liability	Contact HCPP
Construction (Implementation Phase under CAMF) **or** **Renovations** (Operation Phase under CAMF)	**Trade Contractor (Owner is general contractor)** Construction Manager is agent under CCDC 5A	CCDC 17 - 2010 Stipulated Price Contract Between Owner and Trade Contractor for Construction ***(CCDC 5A and CCDC 17 are complimentary documents)***	• Owner property • Third Party bodily injury or property damage • HCA bodily injury or property damage • Products and completed operations • Possible pollution • Business (e.g. contractor stops mid contract)	• Indemnity • Insurance • Bonds • Limitation of Liability	Contact HCPP
Construction (Implementation Phase under CAMF) **or** **Renovations** (Operation Phase under CAMF)	**Construction Manager** ("At Risk" or **contractor)** Hired for services and construction	CCDC 5B Construction Management Contract for Services and Construction	• Owner property • Third Party bodily injury or property damage • HCA bodily injury or property damage • Products and completed operations • Possible pollution • Business (e.g. contractor stops mid contract)	• Indemnity • Insurance • Bonds • Limitation of Liability	Contact HCPP

Project Life Cycle Phase Under CAMF	Common Construction Models	Recommended Contract	Common Risks	Risk Transfer Clauses	Available Supplementary Insurance, Bonds and Indemnity Language
Decommission/ Demolition (Renewal or Disposal end of an asset's useful life under CAMF)	Small deconstruction or demolition projects for a facility or part of a facility at the end of its lifecycle (e.g. projects under $250,000.00)	General Service Agreement (HCA/BC GSA) Or CCDC 2 2008 If demolition is part of the overall renovation project	• Third Party bodily injury or property damage • HCA bodily injury or property damage • Products and completed operations • Possible pollution • Business (e.g. contractor stops mid contract)	• Indemnity • Insurance • Bonds	✓ Insurance Clauses (to be included in the BC Government General Services Agreement (GSA) adopted for use by Health Care Agencies for Construction Projects with an estimated valued of less than $250,000.00) or HCPP Construction Program Bulletin (Project Managers must contact their HCA Risk Leads to get access approval to download this document)
Decommission/ Demolition (Renewal or Disposal end of an asset's useful life under CAMF)	Large deconstruction or demolition projects for a facility or part of a facility at the end of its lifecycle (e.g. projects $250,000.00 or over)	CCDC 2 2008	• Third Party bodily injury or property damage • HCA bodily injury or property damage • Products and completed operations • Possible pollution • Business (e.g. contractor stops mid contract)	• Indemnity • Insurance • Bonds • Limitation of Liability	✓ HCPP Construction Program Bulletin (Project Managers must contact their HCA Risk Leads to get access approval to download this document)
Other: P3 Projects	Contact Partnerships BC	Each project is a "one off"			Contact HCPP

Risks of Not Using the Standard Construction Contracts

There are times when HCPP receives construction contracts from HCAs that are not standard construction industry contracts (i.e. they are self-authored or documents outside the industry norm). We recommend using the standard construction industry contracts that are commonly used for several reasons:

1. Construction contracts normally used within the construction industry (e.g. CCDC) have standards that have been put in place after years of practice. These standards are known by all owners, contractors and architects and any changes that alter the risk allocation are accomplished through supplementary conditions which are normally vetted by all the parties. By self-authoring any contract, the HCA could risk conflict with the accepted industry standards;
2. The risk transfer clauses in CCDC and other contracts are also well known by all who use them. By self authoring a contract, the HCA could very possibly change the usual risk allocation within the document; which may not favour the HCA or be agreed to by a contractor depending on how the risk is weighted;

3. The standard industry contracts are proprietary; therefore, they cannot be copied or used without the consent of the organization that developed them. By doing so even in part, the HCA may be at risk of copyright infringement;
4. Contractors may not respond to a tender or RFP if a non-standard contract is used because extra legal costs would be required when reviewing them;
5. There is also a potential for bidders to increase their bid price or project costs to cover any potential unknowns when they are exposed to change; and
6. The supplementary insurance and indemnity language supplied to the HCAs in our Construction Program Bulletin was intended for use in the industry standard contracts (e.g. CCDC 2 2008, AIBC Contract 6C or RAIC 6 2006 or 2002, etc). When using a non-standard document, the supplementary language, carefully vetted by HCPP, may not work (or work as effectively) and/or incur more legal costs.

Risks of Issuing Purchase Orders (POs) for Small Construction Projects

We have received questions around simply issuing POs to contractors to undertake small construction or maintenance projects for HCAs. This is commonly done with a brief verbal agreement (often by telephone) for the work required backed by the release of a PO. Either a verbal agreement or simply issuing a PO would likely constitute a legally binding contract for the HCA; however, the full intent and description of the services often remain silent and undocumented. Verbal or simple PO type contracts without the full intent or description of the work documented are risky for the HCA for a number of reasons. Claims experience has shown it is common for:

- memories to quickly fade;
- service requirements or understandings (project scope) to suddenly not align;
- disputes to arise (he said/she said scenarios); or
- communication to suddenly stop altogether.

It is never recommended to allow a contractor(s) to begin work without having a written contract in place. Having a written agreement that clearly outlines the services with an indemnity and insurance requirements in place is superior to a verbal or simple PO type contract. Written agreements should require the contractor to supply an insurance certificate as evidence of coverage. Without the insurance certificate from the contractor, an HCA does not know if there is adequate insurance in place protecting the contractor and the HCA (as additional insured) or if they have any insurance at all in relation to the project risks.

We recommend using a General Service Agreement (GSA) for small construction or maintenance projects (or a similar HCA document). HCAs should use a CCDC 2 construction contract rather than a GSA for construction projects if the value is over $250,000.00 (or for lower valued projects should you decide). Our Construction Program Bulletin provides supplementary insurance and indemnity language which can be used in both contracts (i.e. Schedule A - projects valued under $1,000,000.00).

Warranties, Waivers and Limitations of Liabilities

Other areas of concern for the HCA in either construction agreements or associated equipment contracts are warranties (backing deficiencies or equipment failures), waivers and limitations of liability.

Warranties

Ideally there should be a warranty clause in any agreement favourable to the HCA backing the construction or equipment purchased/installed from a contractor, a manufacturer or supplier during the project. Without one, the HCA must rely on the contractor's, manufacturer's or supplier's reputation, any applicable *Acts*, legislation or common law to resolve any facility deficiencies or equipment failures and this can be somewhat limiting and/or costly.

HCAs should always carefully review warranty clauses that have been drafted by a contractor, manufacturer or equipment supplier as these often unreasonably favour the contractor, manufacturer or supplier.

Waivers and Limitation of Liability

Waivers and limitations of liability are commonly seen in many contracts including construction and equipment purchases. HCAs should always approach these with the highest level of caution as these clauses often attempt to transfer risk from the contractor, a manufacturer or supplier to the HCA which may not always be reasonable.

Although not written specifically for construction contracts, our Risk Note titled Waivers, Limitations of Liability and Indemnification Clauses in Contracts provides the HCA with valuable information in this regard.

Contract language should be fair and equitable for both parties when negotiating any warranties, waivers or limitations and, as a minimum, be consistent with the *Sale of Goods Act* or the *Limitation Act*.

Risks Arising Out of the Procurement of Construction Projects

Procurement is a very broad area which includes construction and it may require specialized expertise (e.g. a procurement expert or legal counsel) depending on the size or complexity of the project. The laws relating to procurement are unique to Canada and may be complex because HCAs are dealing with:

1. contract law (e.g. a possible bid contract [or Contract A] or a performance contract [or Contract B]);
2. competition law;
3. applicable legislation (e.g. *Financial Administration Act*, Bonding and Liens Statutes, *Freedom of Information and Protection of Privacy Act* (FOIPPA), etc.); and
4. applicable trade agreements such as the Agreement of Internal Trade (AIT) or the New West Partnership Trade Agreement (NWPTA).

Because of these complexities, the risks to the HCA can be high if they do not follow the appropriate procurement practices, laws/legislation or trade agreements applicable to procurement.

The CAMF Guidelines state: “Procurement processes must be fair, open and transparent to assure the public and potential partners of the integrity of the process and the desired outcome.” The CAMF Guidelines also say: “The public must be given every opportunity to participate in government business. Required qualifications for bidders (e.g. financial capacity and technical capability) should be proportionate to project size and complexity.” Simply put, HCAs need to be open, fair and transparent during their solicitation process to all bidders and ensure contractors who are successful are best qualified in relation to the project complexity.

For the purposes of these Guidelines, we will only discuss potential HCA risks on a high level that may occur during the procurement process for construction. It should be clearly understood the information provided here is for risk advice only and the HCA should contact their legal and/or subject matter expert relating to any legal or procurement questions and/or advice they may require. The possible HCA risks during the procurement process are as follows:

1. **Poor contractor** - The risk that the HCA may end up with a poor contractor is well known to all project managers and one of their first concerns. Prior to sending out an Invitation to Tender (ITT), Request for Proposal (RFP) or Invitation to Quote (ITQ), two ways to reduce the risk of hiring a poor contractor in accordance with the CAMF Guidelines are through prequalification using a Request for Qualifications (RFQ) or Request for Expressions of Interest (RFEOI). These pre-qualifiers can show the project manager: 1. the contractor’s ability to perform the work (i.e. their qualifications, financial resources and track record for delivering a project); and 2. their ability to secure bonds;
2. **Compliance** - All HCAs are required to comply with all applicable laws as well as requirements under the Agreement on Internal Trade (AIT) and the New West Partnership Trade Agreement (NWPTA). The risks of the HCA not complying with these could lead to fines, injunctive relief or public scrutiny;
3. **Legal** – The risks of litigation arising from procuring a construction project are high if proper procurement practices are not followed by the HCA. During any procurement process (e.g. (ITT), (RFP) or (ITQ)), the proponents who are not successful may become disgruntled or allege unfair procurement practices. It is important to remember all proponents have invested a great deal of time, effort, cost and company pride in their preparation to submit a bid. There are many legal cases of proponents (bidders) successfully suing owners <u>after</u> a project was awarded to another contractor. The costs to the HCA arising from such an action are potentially:
    - the cost of the original project; plus
    - the HCA’s legal costs because of a claim;
    - the unsuccessful proponent’s lost profits; and
    - the unsuccessful proponent’s legal costs.

To mitigate these procurement risks HCAs should always:

a) carefully plan the procurement process (i.e. the method of solicitation and the documents or contracts to be used during the bidding) that best fits their construction project;
b) allow the appropriate time to review and complete the procurement process before posting any bid as rushing is a common cause of problems that appear later on;
c) strictly follow the HCA's rules and/or mandatory requirements set out by the HCA during and after the procurement process;
d) always be open, fair, and transparent during their procurement process to all proponents;
e) apply fair weighting and scoring using reasonable criteria set out by the HCA to all contractors equally;
f) ask "what if ?" to any changes that are considered during the procurement process as there may be high risks from such a change;
g) avoid making any material changes (e.g. major change in scope and/or contract requirements) during the procurement process;
h) avoid breaching any contracts (e.g. contracts A or B) during the procurement process; and
i) contact your procurement expert and/or legal counsel to assist if there is ever any doubt.

The risks of litigation because of any material change, breaching a contract, not following the HCA procurement rules, etc. during any procurement process **could be high for an HCA**. If an HCA is made aware of these issues or potential issues in advance, we recommend seeking advice from your procurement expert and/or legal counsel. If any of these issues put an HCA at high risk, the HCA may have to consider cancelling and reposting a construction project.

The use of proper procurement processes reduces the HCA's risk of an unsuccessful contractor challenging a final selection because all parties are subject to the same reasonable rules, evaluations, etc. If the project manager is not aware of these procurement processes when using RFQs, RFEOIs, ITTs, RFPs and ITQs, we recommend contacting the HCA's procurement expert;

4. **Financial** - As stated above, proponents who did not win the bid may be successful in an action against the HCA for their lost profits and legal costs (this is in addition to the HCA paying the winning contractor). These costs may be substantial **and they are not insurable**. Therefore the HCA would be forced to cover these additional costs from their own budget. Alternatively, the HCA may be forced to change the project scope as a trade off and then have to retender the project, or in the worst case scenario, cancel the project all together;

5. **Reputational** - Reputational risks for an HCA may occur as a result of an error in procurement or if a legal claim occurred from an unsuccessful proponent. The

HCA may be subjected to public scrutiny at the local, HCA executive or Minister level;

6. **Succession planning** - One of the risks currently affecting many HCAs is the retirement of some of their most experienced project managers in the next 5 to 10 years. Because of this, inexperienced project managers may potentially handle too many small projects or large complex projects, leading to mistakes in the procurement processes. HCA project managers who are not experienced in the area of procurement should contact their HCA procurement and/or legal experts to discuss their projects prior to sending them out for bids. HCA's can further mitigate this risk by ensuring proper succession planning is in place; and
7. **Audit –** HCAs can be audited for their procurement practices by the Comptroller General's Office under the Ministry of Finance's Procurement Governance Office.

When in doubt about how to manage any of these risks, project managers should always contact their HCA procurement and/or legal expert.

Other valuable reference materials or training can be found at the following websites:

a) Capital Construction Procurement Checklist
http://www.fin.gov.bc.ca/tbs/NEW%20-%20MERGED%20Capital%20procurement%20checklist%20FINAL_%202007_12_11.pdf

b) The Province's Core Policies Manual on Procurement located at: http://www.fin.gov.bc.ca/ocg/fmb/manuals/CPM/06_Procurement.htm; and

c) BC Government's Purchasing Services located at: http://www.pss.gov.bc.ca/psb/home.html. There are also many independent law firms and/or subject matter experts who specialize in procurement training relating to construction.

Security Risks – Construction Bonds

Small Construction Projects

The CAMF Guidelines state "agencies should generally require bidders to provide performance bonds and labour and materials payment bonds" to ensure security is in place to protect the HCA. Questions do arise from HCAs on the need for such bonds on smaller projects, but what constitutes smaller projects is not clearly defined. The CAMF Guidelines are currently based on "value for money." Applying value for money to bonding is no different than other aspects of the project and HCAs should ask if the cost for bonds is worth the security provided in relation to other available options.

It is important to remember all bonding costs are eventually transferred back to the HCA in the contractor's costs. Bonding costs may fluctuate depending on market and/or the availability of bonding facilities. Regardless of any market fluctuations, bonding is subject to minimum fees or premiums. For this reason, value for money on smaller projects may not be realized. In these cases, care must be taken to mitigate project security risk. The tipping point for bonding requirements really depends on how much the minimum premium is and when the value of the project equals the premium being paid (e.g. at a 1% rate, the tipping point is about $150,000.00). Even if the cost of bonding seems justified on a single project; HCAs must consider the cumulative costs associated with obtaining bonds on every project. Requiring contractors to purchase bonds on projects valued at or below $150,000.00 would not be cost effective or show value for money.

Standard and Larger Construction Projects

Bonding is the most common form of contract security on most construction projects (i.e. under $10,000,000.00) but on larger projects (i.e. $10,000,000.00 and over) contractors may request and/or an HCA may consider alternative forms of contract security (e.g. Irrevocable Letters of Credit, Default Insurance (e.g. Sub-Guard), Parental Guarantees, etc.). These alternative forms of contract security may be acceptable and, at times, more costs effective for the HCA. **Alternative forms of security can be complex; therefore, it is strongly recommended any such security be reviewed by HCPP before the HCA accepts it.** The tender or RFP should be clear that alternative forms of contract security may be considered. This ensures the HCA is being transparent and mitigates the risk of allegations that the procurement process was unfair since project security pricing can impact the overall bid price.

Costs

There is value to using surety bonds as a form of contract security <u>but</u> it can be costly for the HCA if they are requiring both the general contractor and subcontractor to supply Performance Bonds and Labour and Material Payment Bonds at a standard 50% of the contract value. The costs associated with multiple layers of bonding can be high, increasing the cost of contract security by as much as 180%. In some circumstances dual obligee bonds may be utilized to reduce duplicate surety costs. Variances on who is responsible for the Work during the projects may occur so the HCA needs to consider this to ensure they are not double bonding and incurring additional costs. Because bonding costs can be high, the HCA should be open to alternative forms of contract security on higher value projects ($10,000,000.00 and over) as long as the alternative is considered secure.

CCDC 2 - 2008 Contract

In addition, it is important that HCAs be aware that the bonding clause found in the CCDC 2 - 1994 Contract was amended in the CCDC 2 - 2008 Contract. As a result, RMB has developed new bonding supplementary conditions for the CCDC 2 - 2008 which can be found at: http://www.fin.gov.bc.ca/pt/rmb/construction.shtml

<u>Security Risks - Bonds and Irrevocable Letter of Credit</u>

In following with the CAMF principles, when value for money can be established, HCAs are required to use Bid Bonds, and should consider using Performance Bonds and Labour and Material Payment Bonds as contract security when procuring construction or renovation projects. Bonds are the most common form of security for HCAs during procurement of construction/renovations projects for the average construction project (e.g. lower than $10,000,000.00). As noted above, contract security alternatives may be used on higher value projects ($10,000,000.00 or higher) if they are secure (again, contact HCPP). One alternative is an Irrevocable Letter of Credit. The following table compares the features of surety bonds and Irrevocable Letters of Credit:

	Surety Bonds		Irrevocable Letter of Credit
WHAT IS IT?	A bond is a formal guarantee made by a third party company (a Surety) to an Owner/HCA (the Obligee) that the Surety will remedy any default on the obligations of the contractor (the Principal) during procurement (Bid Bond) or construction (Performance Bond), as well as payment of suppliers and sub-trades for labour and materials (Labour and Materials Payment Bond).		Irrevocable Letter of Credit is issued by the contractor's bank and guarantees payment to the HCA for costs to remedy default on the obligations of the contractor.
CASH FLOW	Bonds are not secured by the contractor's assets so they do not diminish the contractor's borrowing capacity and liquidity, allowing them to perform at full strength. However, surety bonds do require an indemnity from the principals of the contracting firm to the surety company.		An Irrevocable Letter of Credit is secured against the contractor's assets.
QUALIFYING	The goal of surety bond underwriters is to never sustain a loss. Therefore, they are concerned with the contractor's ability to perform the contract as well as its financial strength. Surety underwriters will review and assess the contractor's financial statements, experience, the nature of the project, the contractor's workload, claims history, company's primary staff, etc. Surety companies often require an indemnity directly from the owners or principals of a private contracting company (including direct family/spouses) to ensure they have an avenue of recovery should a bond ever be called upon. Surety underwriters evaluate contractors using the "3 C's": Character, Capacity and Capital.		When offering an Irrevocable Letter of Credit a bank underwrites the contractor to ensure the contractor has the ability to repay the bank in the event that the HCA makes a call on the Irrevocable Letter of Credit.
OPTIONS UPON DEFAULT	Should the contractor default, a Surety has four options for remedy under a Performance Bond which are as follows: 1. remedy the default; 2. complete the contract in accordance with its terms and conditions; 3. procure bid(s) that are acceptable to HCA to complete the project, in accordance with the original contract terms and conditions, at the lowest acceptable price, arrange a contract between the successful bidder and HCA and ensure funds are available to complete the work, less the balance of the original contract price; or 4. pay the HCA the lesser of (1) the bond amount or (2) the HCA's proposed cost of completion, less the balance of the contract price.		Should the Contractor default when an Irrevocable Letter of Credit is used, the HCA annexes the letter of credit with a full or partial drawdown and then manages the contractor default.
DURATION	Bonds remain in force for the full term of the contract and the associated maintenance period.		An Irrevocable Letter of Credit must be matched to the term of the contract.
COSTS	Bonds typically cost 0.5% to 2% of the contract value. Bond premium is subject to surcharges based on extended warranty periods, broad form language, etc. and most Sureties charge premium on the remaining contract value at the anniversary date if the contract extends beyond 12 months.		Cost of an Irrevocable Letter of Credit may range from 0.5% to 2% of the Letter of Credit value depending on the structure of the contractor's Letter of Credit facility with their bank.
COVERAGE	The rule of thumb regarding Performance Bonds and Labour and Material Payment Bonds is to value each at 50% of the contract price. There are variances; however, that may occur depending on the project such as when the labour and material costs are less than 50% of the value of the Work. Labour and Material Payment Bonds are in place to protect subcontractors, labourers, and suppliers against non-payment. This benefits the project Owner/HCA because it helps prevent these parties from filing liens.* Labour and Material Payment Bonds also cover defects after completion for up to 10% of the contract value for one year. Please Note: It is incumbent on the Owner to ensure that the surety company is made aware of any material changes to the original contract. Failure to do so could compromise the surety coverage. *Note: it is difficult if not impossible to file a lien against property owned by the Province.		An Irrevocable Letter of Credit typically covers 5 to 50% of the value of the contract. While an Irrevocable Letter of Credit does not specify protection is for subcontractors, labourers, suppliers when they are not paid the Irrevocable Letter of Credit may be used to satisfy liens and contractor payment demands.
CLAIMS PROCESS	A bond claim for contractor default has the potential for delay. Sureties may wait out mediation, arbitration and/or litigation before the claim is resolved. This can put the HCA at risk if the project is time sensitive.		The HCA has unilateral discretion to draw on a letter of credit (although they must act in good faith). Timing of payment in event of claim is generally 1 to 5 days from date of notice.

In addition to the above, the CAMF Guidelines recommend that “certified cheques and irrevocable letters of credit should only be accepted in exceptional circumstances.” When a contractor offers the HCA an Irrevocable Letter of Credit, a company bond or even a credit back on the contract instead of a surety bond, flags should go up as to why. Is a Surety company unwilling to provide the contractor with a bond? Is the contractor over extending themselves, taking on too many jobs at once or otherwise not in a good financial position? Any of which could put your project at risk. Please note that offering alternative forms of security is not necessarily a sign that there are any additional risks to the project or that the contractor is not sound. Many contractors are offering alternative forms because they can be significantly cheaper than surety.

Security Risks - Surety Bonds and Default Insurance (sometimes called Subguard®)

The use of construction bonds for security is discussed above.

Default insurance, sometimes called Subguard® (a proprietary term owned by Zurich who was the first to underwrite and offer such a policy), is another form of contract security that general contractors may ask to use in lieu of bonds**.** There are pros and cons to both types of contract security which we have summarized in the table below:

	Surety Bonds		Default Insurance
WHAT THEY ARE	As noted above, Surety bonds are three party agreements between the surety, general contractor and HCA that guarantees to protect the HCA should a general contractor default; therefore, the HCA has direct access to the surety company. General contractors in turn can secure bonds from their subcontractors as required for similar protection against subcontractor defaults.		Typically only obtained by very large financially secure contractors with experience in risk financing. Default Insurance is a two party agreement between the general contractor and insurer which reimburses costs incurred by the general contractor due to a subcontractor’s default. The HCA is not a party to this agreement.
QUALIFYING	Surety companies have stringent underwriting criteria before agreeing to issue a bond to a general contractor and/or subcontractors.		General contractors in conjunction with the insurer manage the prequalification process for subcontractors covered under Default Insurance.
HCA ACCESS	Surety bonds cover the HCA in the event of a general contractor default.		Because the HCA is not a party to the Default Insurance policy, there is no direct coverage for the HCA. This leaves a gap in protection for the HCA which is typically 10 – 20% of the value of the Work. This gap can be addressed by obtaining a Gap Bond, an Irrevocable Letter of Credit, or a Parental Guarantee under the condition these forms of contract security are determined to be secure.
OPTIONS UPON DEFAULT	Should the general contractor default, a Surety has four options for remedy under a Performance Bond which are as follows: 1. remedy the default; 2. complete the contract in accordance with its terms and conditions; 3. procure bid(s) that are acceptable to HCA to complete the project, in accordance with the original contract terms and conditions, at the lowest acceptable price, arrange a contract between the successful bidder and HCA and ensure funds are available to complete the work, less the balance of		Claims are made by the general contractor and only they can seek reimbursement from their insurer for their loss. As with any form of security, this exposure can be effectively mitigated through use of appropriate progress payments and proper certification of labour and material payments

	Surety Bonds		Default Insurance
	the original contract price; or 4. pay HCA the lesser of (i) the bond amount or (ii) the HCA's proposed cost of completion, less the balance of the contract price.		
CLAIMS PROCESSES	A bond claim for general contractor default has the potential for delay. Sureties often wait out mediation, arbitration and/or litigation before the claim is resolved. This can put the HCA at risk if the project is time sensitive.		These claims are often resolved faster than a bond claim.
DOLLAR COVERAGE	Performance Bonds typically cover 50% of the value of the Work. A separate bond in favour of the general contractor is issued for each subcontractor. Performance Bonds are almost always accompanied by Labour and Material Payment Bonds with a value of 50% of the Work. Please Note: If subcontractors do the majority of the work on a project and an Owner requires the general contractor to carry a Performance Bond equal to 50% of the Work, this will result in increased surety costs to the Owner. i.e. costs are incurred by doubling the surety requirements. The Owner may mitigate this by carefully evaluating who is performing the Work then adjusting the percentage requirements accordingly.		Contractor Default Insurance policies typically provide limits equal to the value of the Work. Care should be taken to specify that the Default Insurance must be project specific, covering only the project that is being undertaken for the HCA and not encompassing all projects that the contractor may be working on.

The type of contract security chosen is at the discretion of the HCA (e.g. Bonds, Irrevocable Letter of Credit, Default Insurance, Parental Guarantees, etc). We recommend any change from the standard forms of contract security (e.g. bonding) be carefully analyzed by the HCA to ensure the best alternative for the project is selected. **It is strongly recommended the HCA contact HCPP if they are considering alternative methods of contract security.**

Project security, regardless of the type selected, is a risk financing tool and should never be used as a risk mitigation tool. The goal of the HCA should be to have effective risk mitigation tools in place to ensure that risk financing tools such as project security or insurance are only relied on as a last resort. HCA's must ensure that sound project management teams are established to ensure that appropriate mitigation measures are in place and being complied with. There are many sound risk mitigation techniques available such as progress payments tied to clearly defined progress goals/milestones including certification of that payment of trades and suppliers or adequate holdbacks and liquidated damages among many others.

Risks of Not Placing Project Insurance under the Provincial Construction Insurance Program

Our Construction Program Bulletin instructs all HCAs on how to place all construction projects valued at $1,000,000.00 or over under the Provincial Construction Insurance Program (the Program). The Program has been set up as part of Provincial Government policy related to construction and, as government corporations, HCAs are required to utilize it. If an HCA does not place construction insurance under the Program, it may be exposing itself to unintended risk including the following:

1. HCPP does not cover construction risks undertaken by contractors so the HCA may not be protected if the contractor is uninsured or is under insured;
2. The contractor's insurance policies may not appropriately cover the HCA's interests in the project or may limit the HCA's access to the insurer;
3. The contractor's (or their subcontractor's) insurance may be inadequate to cover some construction risks (e.g. narrowed coverage or exclusions for certain risks commonly covered under the Program), possibly because of the high costs to maintain;
4. The contractor's insurance may be shared amongst others (i.e. one policy covering all their projects);
5. Should the contractor fail to arrange appropriate insurance or if the limits are too low to cover a claim, the HCA may have to absorb additional costs or potentially call on the project security if the contractor is placed in a default position;
6. If the project was audited, the HCA would not be in compliance with government policy (i.e. placement of coverage under the Program) and the HCA would be open to public scrutiny;
7. After a claim and without the appropriate coverage in place (e.g. builders risks and wrap-up policies), the project may be delayed because of contractor or insurer disputes over who is responsible for the loss and which policy (often there are many involved) will respond;
8. The HCA could be held in breach if it was responsible to arrange insurance coverage and the project contract does not properly align with the insurance placed; and
9. The HCA is very likely paying more for the contractor to arrange coverage than if it were arranged by the HCA using the Program because the contractor's cost of insurance is included in its bid price and usually contains a mark-up or administration fees for the contractor to "manage" the insurance.

The insurance negotiated by the Province under the Program reduces the HCA's exposure to the above risks because it:

1. is purchased directly by the HCA (providing control over the policies and eliminating further mark-up or fees);
2. provides broad coverage;
3. is project specific;
4. provides limits that are appropriate for the average project risks (or which can be adjusted for higher risk exposures);
5. protects the owner and all contractors working on the project; and
6. removes the issues around subrogation amongst the parties to the contract.

Stating Appropriate Limits of Coverage in the Construction Insurance Underwriting Questionnaire

To ensure the HCAs are not paying for additional insurance premiums under the Construction Insurance Program, project managers should only enter the total “construction costs” (not their total project costs) under the Estimated Project Cost section when filling out the Construction Insurance Underwriting Questionnaire (the Questionnaire). Construction costs (both Hard and Soft) are broken down in the latest version of the Questionnaire (or the construction insurance application).

Hard Costs are the costs to build or renovate the facility and include the materials forming part of the building. Hard Costs include contractor/subcontractor costs which are directly connected to the construction of the building. The materials and contractor costs are known by pricing.

Soft Costs are “additional costs” that, although not direct, would result from an insured loss including items such as professional consultants’ fees, financing costs, legal fees or permits. A detailed breakdown of these costs is provided in the latest Questionnaire. The professional architects or engineers costs should not include the costs to completely redesign the structure as this has already been done. These costs require a little more of an educated estimate as there is no hard and fast rule and plus no one truly knows the severity or duration of a loss or the resulting costs prior to a loss occurring. Because of this, it is important to state a reasonable estimated amount as these costs are not covered unless an amount is indicated, and then only to the limits provided.

Over stating any estimated cost in the Questionnaire is not beneficial to the HCA as they will pay insurance premiums based on a limit that cannot be substantiated following a loss (i.e. the HCA cannot recover more than the actual amount of the loss, even if a higher limit of insurance is purchased).

Whenever in doubt, project managers can contact their risk management consultant at HCPP for assistance.

Equipment forming part of the construction may be considered for coverage under the Course of Construction (COC) policy and this is discussed below.

Equipment Forming Part of the Construction Project

Equipment (such as large generators, some kitchen appliances, etc) that form part of the construction project are normally included in the cost of construction. Often times HCAs pre-purchase this equipment. While HCPP does not cover equipment that will form part of the construction when it has been purchased by contractors, it will cover equipment that has been pre-purchased by the HCA and placed in storage. It would be at the discretion of the project manager to include equipment pre-purchased by the HCA in the construction costs or to have HCPP cover it. If a project manager decides not to include the pre-purchased equipment in the construction insurance, all associated costs such as the labour and materials to install the equipment should still be included in the Questionnaire. When considering whether to including this equipment under the project, it is important to note that coverage for property in transit or temporarily in storage away from the project site is subject to a sublimit of $1,000,000.00 under the COC policy.

If a project is solely or mainly the installation of large piece of equipment purchased from a supplier and installed by the supplier or its contractor at or within an HCA facility, the HCA should endeavour to have the equipment remain the responsibility of the supplier/contractor until commissioned and accepted by the HCA. If such a project exceeds $1,000,000.00 (requiring the Owner to provide coverage under the Provincial Construction Insurance Program) due to the high value of the piece of equipment to be installed, the HCA should deduct the equipment value from the overall project cost. The value of the project now likely falls below the Program requirements and can be supplier/contractor insured. The contract should clearly indicate that the equipment is at the risk of the supplier/contractor until accepted by the HCA. The insurance requirements should clearly reflect this. The intended risk allocation and insurance language should form part of the procurement process before the contract is awarded. If changed after the award, the HCA may be subjecting itself to a procurement risk, as discussed above. Whenever in doubt, project managers can contact the HCA's risk management consultant at HCPP for assistance.

Medical Equipment Within Construction Projects

Medical equipment (such as MRIs, CT scanners, etc.) is highly specialized and sensitive equipment which normally remains the responsibility of the supplier and installing contractor until commissioned and accepted by the HCA. Because of this, medical equipment and the installation is usually supplier/contractor insured. Medical equipment is normally procured separately from construction projects and it is not considered a part of the facility under construction. There may be times when an HCA takes ownership of such equipment prior to the installation and HCPP will cover HCA owned medical equipment should a loss occur. The HCA should ensure that it does not void any warranties or assume responsibility for the supplier/contractor's work when taking ownership of medical equipment before it is installed. Ownership and responsibility to arrange insurance of medical equipment should be reflected in the contract and set out in the procurement process pre-award. If changed after the contract is awarded, the HCA may be subjecting itself to a procurement risk as discussed above. Whenever in doubt, project managers can contact the HCA's risk management consultant at HCPP for assistance.

Insuring Parking Lot Construction

Parking lot projects consisting mainly of ground works, paving and concrete are normally under a $1,000,000.00 and contractor insured but there are times we do see insurance applications because a project exceeds $1,000,000.00. In these projects there is no building per-se and the main risk would be third party liability. Property losses for these types of projects would normally consist of theft or destruction of the materials forming part of the works, paving or concrete. These property losses tend not to exceed the $10,000.00 deductible ($25,000.00 deductible if the project value is greater than $10,000,000.00) under the Provincial Construction Insurance Program; therefore, a COC policy is not likely required but a wrap-up or commercial general liability policy would be. The insurance structure should be reflected in the contract, insurance language and procurement process pre-award. If changed after the contract is awarded, the HCA may be subjecting itself to procurement risks, as discussed above. Whenever in doubt, project managers can contact the HCA's risk management consultant at HCPP for assistance.

Projects Values That Unexpectedly Fall Short of the Provincial Construction Insurance Program

There are times when a project manager anticipates the costs of the project will meet or exceed the $1,000,000.00 Owner insured requirement under the Provincial Construction Insurance Program. The project manager then later discovers the project value does not meet or exceed $1,000,000.00 after all bids have been received but the contract and insurance language in the procurement documents state the project will be Owner insured. If this should occur, we recommend the project manager forward the Construction Insurance Underwriting Questionnaire despite the value falling short of the $1,000,000.00 threshold rather than the HCA subjecting itself to potential procurement risks by allowing the contractor to place coverage. Whenever in doubt, project managers can contact the HCA's risk management consultant at HCPP for assistance.

Warranties Clause for Wood Framed Construction Projects

Wood framed construction projects are understandably at higher risk of fire than fire resistant concrete structures. Because of this, it is normal for construction insurers to put warranty clauses in their COC policies when the building is wood frame construction to ensure risks from fire losses are mitigated. The COC policy under the Provincial Construction Insurance Program contains a Warranties Clause for Wood Framed Construction Projects which sets out certain conditions that must be complied with in order for the policy to respond, such as watchman or video surveillance requirements. By not complying with the Warranties Clause, HCAs may be at risk of voiding the COC policy if it can be proven failure to comply with the Warranties Clause materially contributed to a fire loss. Due to this, it is strongly recommended all project managers review and comply with the Warranties Clause before commencing any wood frame construction. The Warranties Clause under the Provincial Construction Insurance Program is attached to the policy that is sent out to the HCA or it can be found at: http://bchcpp.iwebez.com/files/%7B0D667035-EE90-4234-BF99-9B30E31A5357%7Dwood%20frame%20warranty%20BC%20Govt.pdf

Under section one of the Warranties Clause, projects over $10,000,000.00, there are two options available to the HCA (i.e. video surveillance and/or a watchman patrol). Where video surveillance is used, Sonitrol is the sole service provider. If the HCA wants to use a service provider other than Sonitrol, they must contact the underwriter for approval on a project by project basis. It is also important to note only section one of the Warranties Clause applies to projects over $10,000,000.00 and the other four sections within the Warranties Clause have lower limit requirements or none at all (i.e. apply to all wood frame projects). Regardless of the value or size of any wood framed structure, the risk of fire exists and the HCA should not use the construction value as gauge of when or not to use appropriate mitigations/monitors. The HCA must meet or exceed the Warranties Clause for Wood Framed Construction Projects under the

Program but it is still prudent to use video surveillance and/or a watchman patrol as needed.

Ending Construction Insurance Too Soon

HCAs commonly ask when the Owner purchased construction insurance placed under the Program should terminate. There are two separate policies in effect to cover a construction project: 1. a Builders Risk or Course of Construction (COC) insurance policy for property coverage; and 2. a Wrap-up Liability insurance policy for liability coverage. The two policies are separate but normally work together. Additional costs for extension(s), if required, are usually attached to the COC policy only and the Wrap-up policy can be extended at no charge. If construction is not completed before expiry of the construction coverage, extensions are needed and HCAs are required to notify HCPP.

It is important to note that construction insurance will terminate before the stated expiry date if the Project has been formally completed, tested and accepted by the HCA. The insurance coverage will also terminate if the Owner (HCA) occupies the premises for any purpose other than habitational, office, retail sales, parking, or for the installation, testing and commissioning of equipment forming part of the Project. It may be possible for the insurer to grant permission for other types of occupancy or use, but this must be specifically arranged. Project managers should contact their HCA's risk management consultant at HCPP for assistance.

Sometimes a project manager may end the coverage too soon (e.g. before a project is substantially completed, or the architect/engineer has signed off, etc). It is important that the COC insurance stay in place until the project is "formally completed, tested and accepted" by the HCA or until the end "date shown on the Declarations" as stated in the policy, unless the HCA wants to end the coverage earlier. If the HCA either accepts the project too soon or does not extend the COC policy period then the COC coverage will cease before the project is completed. The Wrap-up policy also ends once the HCA accepts the project as completed or when the operations commence but coverage continues for 24 months under the products and completed operations portion of the policy (e.g. tradespersons in the building correcting deficiencies after the building is in operations would fall under completed operations). When in doubt, project managers should contact the HCA's risk management consultant at HCPP for assistance.

Risks During Demolition or Decommissioning

Facility Renovations and/or Decommissioning Equipment

It is common for demolition to occur when an HCA plans to complete a renovation or addition to an existing facility. Risks associated with demolition during this time are normally moderate to high depending on the nature of the demolition and if the facility is in operation.

Moderate demolition risks might include but would not be limited to:

- removing building walls;
- excavation;

- mould remediation (high risk if remediating within any operating facility with patients or staff);
- decommissioning boilers or facility equipment.

These projects may require specialized independent expertise to handle.

High demolition risks would include but not be limited to:

- asbestos remediation (e.g. friable materials defined under Health Canada);
- mould remediation within any operating facility with patients or staff;
- blasting;
- discharge of pollutants (e.g. contaminating air, ground or water with anything adversely altering the environment in accordance with Provincial or Federal laws);
- decommissioning a facility or equipment involving radioactive isotopes;
- working next to high value property (e.g. underpinning tall buildings in a densely populated area).

These projects do require very specialized experts to handle.

Each project is different and requires a risk assessment be completed (in accordance with CAMF Guidelines) prior to any demolition or decommissioning project to identify what the associated risks to the HCA are. It is always important to remember the size of the project does not indicate the level of risk. Small projects can have high risks (e.g. decommissioning equipment involving radioactive isotopes). For more information on higher risks projects, please contact your risk management consultant at HCPP or refer to our Risk Wise article on "What is a "high hazard" or "unusual exposure" in a construction project?" in our newsletter, Handle With Care (Fall/Winter 2009 Edition).

Demolition of an Entire Facility

When a HCA is going to demolish or decommission an entire facility, these projects are normally "one-off" and any associated risks are high. Because of this, HCAs are required to complete a detailed risk assessment (in accordance with CAMF Guidelines). It is also strongly recommended that you contact HCPP prior to commencing any such project so we can review the risks and assist you with the insurance requirements prior to the procurement.

Contractor's Insurance for Demolition Projects

As noted above, demolition or decommissioning projects (including those involving renovations) often times require specialized contractors. Because of this, HCAs must ensure contractors have appropriate insurance in place, where possible, to protect the contractor and the HCA should a claim ever arise. Insurance coverage is available to contractors during a demolition project for most of the associated risks (e.g. general operations) under CGL or wrap-up liability policy. However, it is important to remember CGL or wrap-up insurance policies commonly have coverage limitations for some risks (e.g. limited pollution covers sudden and accidental spills only) or exclude other risks altogether (e.g. mould or asbestos).

Therefore, HCAs should always consider having contractors arrange separate coverage (e.g. Contractors Pollution Liability Insurance) to address these high hazard operations, where available. Language to insert into contracts when this additional coverage is required can be found at: Contractors Pollution Liability Insurance supplementary conditions to the CCDC 2 – 2008 Contracts for Health projects insured by the Owner (HCPP May 2009 Construction Program Bulletin addendum). Never assume there is appropriate insurance coverage in place for the contractor and always request an insurance certificate for policies the contractor is required to provide pursuant to the terms of a contract. Coverage for high hazard exposures should be specifically evidenced on the contractor's certificate of insurance.

HCAs must also be aware that coverage for these risks may be costly; therefore, contractors may resist purchasing them. There may also be times when there will be no insurance available in the market for some types of risks or a risk is simply uninsurable (e.g. nuclear or radioactive risks during demolition or decommissioning). In these cases, it is recommended that the HCA conduct a risk assessment to document and determine:

- what risks might be associated with the activity, how likely they are to occur and the impact on the HCA if they do occur;
- any possible risk transfer mechanisms (e.g. contractual indemnity and contractor insurance);
- the cost of any risk transfer mechanisms (i.e. the contractor will always flow through a risk premium to the HCA to assume the risk). The HCA should consider whether it makes sense to pay the cost of risk transfer to the contractor or if it would be more beneficial to retain the risk itself;
- if no insurance is available to the contractor and the HCA wishes to transfer or share the risk, is the contractor financially strong enough to absorb some or all of the costs to remediate the damage (if the HCA is considering this option, we suggest contacting HCPP for advice); and
- if the HCA decides to retain some risks, are there mitigation strategies it could put in place to reduce the likelihood or impact.

It is important to remember the risk management consultants at HCPP are insurance and risk management experts and we are available to assist the HCA project managers upon request.

Other Related Risk Notes, Program Bulletins, Documents or Articles

HCPP May 2009 Construction Insurance Program Bulletin
www.hcpp.org

Risk Note - Waivers, Limitations of Liability and Indemnification Clauses in Contracts
http://bchcpp.iwebez.com/files/%7BBDF9E6F2-28C3-416F-BAE4-A9D3DEF93C7B%7DWaivers%20and%20%20indemnification%20in%20contracts.pdf

Handle With Care - What is a "high hazard" or "unusual exposure" in a construction project?
http://bchcpp.iwebez.com/files/%7B0D348CE7-4E60-4127-ABFF-4EF94F06DACF%7DFall%20Winter%202009.pdf

Risk Note - Owner-Controlled Wrap-up Liability Insurance
http://bchcpp.iwebez.com/files/%7BC944D3C3-844B-4314-BAF1-F9B51F62CE84%7DWrap-up%20Liability.pdf

Template General Service Agreement (GSA)
http://bchcpp.iwebez.com/files/%7B99D52BE4-DA16-4AB2-9275-22870A8E252F%7DTemplate%20General%20Service%20Agreement.pdf HCPP Insurance Matrix
www.hcpp.org

Handle With Care - Why is it important to make sure the insurance requirements in your construction project contract match the coverage provided in the Provincial Construction Program?
http://bchcpp.iwebez.com/files/%7BF3635BD6-AAD6-4C6B-B02F-5EB8DF3D2C4B%7DSpring%20Summer%202009.pdf

Other related Links

The Canadian Construction Documents Committee (CCDC)
http://www.ccdc.org/documents/index.html and includes the CCDC 2 2008 and Design-Build Contract 14 (Owner and design Builder enter)

Royal Architectural Institute of Canada (RAIC)
http://www.raic.org/index_e.htm and includes the RAIC 6 2006 or 2002

The Architectural Institute of British Columbia (AIBC)
http://www.aibc.ca/ and includes AIBC Contract 6C

Association of Consulting Engineering Companies (ACEC)
http://www.acec.ca/en/index.asp

Canadian Construction Association
http://www.cca-acc.com/en/

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