A GUIDE TO THE
CONSTRUCTION MANAGEMENT PROJECT DELIVERY METHOD

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CANADIAN CONSTRUCTION ASSOCIATION
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1.0 Introduction

All forms of project delivery in the construction industry typically involve, at some point in the process, one or more contractors who perform construction work in accordance with drawings and specifications, and are normally paid to do so based on a stipulated price, unit price, or cost plus arrangement (or some combination of these). Common forms of project delivery are: (1) Design-Bid-Build, (2) Design-Build, (3) Construction Management, and variations of each of these.

It is important for Owners to select the most appropriate delivery method for their project and their own specific needs, taking into account considerations related to time, cost, and risk allocation. The purpose of this guide is to provide information about the Construction Management form of project delivery. This guide:

- Explains what Construction Management is and the two fundamentally different forms of Construction Management contracts.
- Explains the circumstances under which Construction Management is beneficial and an Owner might consider using it.
- Describes the services a Construction Manager typically provides.
- Provides guidance to Owners on when and how to procure Construction Management services.
- Highlights some of the important issues and considerations relating to the use of Construction Management.

Construction Management should not be confused with “project management” by or on behalf of the Owner. Project management is not a distinct project delivery method and implies a much broader set of responsibilities than Construction Management. Project management is the overall management of all aspects of a project from its inception through design, construction and use. The Owner's project manager typically acts as the Owner’s agent and makes decisions on the Owner's behalf. The project manager is, amongst other things, typically responsible for procuring, on the Owner’s behalf, the services of consultants and contractors, including the Construction Manager in the case of Construction Management project delivery. Some firms may be capable of providing both project management and Construction Management services to Owners, but doing so on the same project creates inherent conflicts of interest, which are best avoided.
2.0 What Is Construction Management?

Construction Management takes a collaborative team approach to the design and construction process right from the outset of the project. The concept joins the Owner’s team, the design consultant team (called the Consultant in this guide) and the Construction Manager’s team into a project team whose common objective is to deliver the project in a way that meets the Owner’s time, budget and quality objectives.

Under this form of project delivery, the Owner selects the Construction Manager (typically a construction contracting firm) early in the process, often shortly after making the decision to undertake a project. This ensures that the Construction Manager’s knowledge, skills and experience can be used to full advantage during the design phase. A primary objective of the project team, particularly in the pre-construction phase of the project, is to achieve efficiencies with respect to time, budget and constructability. The Construction Manager provides valuable advice and assistance to the Owner and Consultant throughout the design process.

Under the Construction Management form of project delivery, the Owner contracts separately with:

- a Consultant to provide design services,

- a Construction Manager to provide services only, or services and construction, depending on the form of Construction Management contract selected, and

- Trade Contractors to provide the actual construction work (if the Owner selects the services only form of Construction Management).

The Canadian Construction Documents Committee (CCDC) publishes two significantly different standard forms of Construction Management contracts (CCDC 5A and CCDC 5B) under which the Construction Manager’s and Owner’s respective roles and assumed risks differ substantially. The characteristics of each form of contract are described below. The most important distinction is with regard to who contracts with the Trade Contractors. Under CCDC 5A it is the Owner and under CCDC 5B it is the Construction Manager. The Owner must decide at the outset on which form of Construction Management contract to use.
CCDC 5A  CONSTRUCTION MANAGEMENT CONTRACT - FOR SERVICES

- CCDC 5A is a contract between the Owner and Construction Manager for services only, under which the Construction Manager acts as an agent of the Owner, with limits of authority as determined by the Owner and described in the contract.

- The Owner contracts separately and directly with multiple Trade Contractors to perform the Work (construction). CCDC 17 – STIPULATED PRICE CONTRACT FOR TRADE CONTRACTORS ON CONSTRUCTION MANAGEMENT PROJECTS is the standard form CCDC contract used for this purpose.

- The Construction Manager provides advisory services to the Owner and acts as a limited agent of the Owner in administering and overseeing, on the Owner’s behalf, all of the construction contracts between the Owner and the Trade Contractors. The Owner retains all of the contracting risks associated with these contracts.

CCDC 5B  CONSTRUCTION MANAGEMENT CONTRACT - FOR SERVICES AND CONSTRUCTION

- CCDC 5B is for a type of Construction Management also known as “Construction Management at Risk” or “Construction Manager as Constructor”.

- The Construction Manager contracts with the Trade Contractors as subcontractors and is responsible for their performance and the performance of the construction work as a whole.

- The pre-construction advisory services provided by the Construction Manager under CCDC 5B are similar to those provided under CCDC 5A. However during construction, the roles and responsibilities of the Construction Manager are similar to those of a contractor under the Design-Bid-Build form of project delivery and a cost plus type of contract.
CCDC 5B is essentially a “cost of construction plus a fee” contract for pre-construction advisory services and the construction Work. However the parties may also consider the following options:
- a Guaranteed Maximum Price (GMP option),
- sharing of cost savings if the final construction cost is less than the GMP (GMP Plus % Cost Savings option), or
- converting CCDC 5B into a stipulated price contract at an appropriate stage in process.

It is essential that the Owner and Construction Manager execute either CCDC 5A or 5B (amended if necessary with Supplementary Conditions) before the Construction Manager provides any pre-construction services and especially before any trade contracts are awarded. To do otherwise is exceedingly poor business practice and fraught with risk.

### 3.0 Why Use Construction Management?

Construction Management facilitates the integration of the design and construction processes (which remain contractually separate) to better meet the Owner’s project objectives.

The types of services that can be provided by a Construction Manager throughout the design and construction process can significantly benefit Owners on many projects, especially if the Construction Manager is retained at or near project inception. Advice and assistance can be provided in the following areas:
- Site selection.
- Building types.
- Preliminary cost data.
- Preliminary scheduling of design and construction.
- Consultant selection.
- Design assist.
- Market conditions.
- Pre-purchasing of material and equipment.
- Concept planning.
- Design criteria.
- Preliminary design.
- Final design and working drawings.
- Contract documentation.
- Trade contract bidding, contract award.
- Procurement of materials and equipment.
- Construction.
- Pre-operation testing and commissioning
• Project take-over.

The Construction Management method of project delivery can provide especially good value to the Owner, and is therefore worth considering, when one or more of the following conditions exist:

• When the project is a complex, multi-phased renovation of an existing user occupied facility, e.g. a hospital. For these types of projects, early and ongoing advice from a contractor's perspective with respect to work sequencing, packaging and scheduling, as well as site coordination during construction is very beneficial.

• When time is critical to the Owner and it is essential to attain an early total project completion date (from project inception to occupancy or use). A tight schedule may be attainable only through fast-tracking (overlapping design and construction).

• When there is a desire for early, unbiased advice on constructability, construction methods, costing, and scheduling.

• When the Owner's needs and requirements are undetermined or design options need evaluation in the early stages of a project.

• When market conditions are rapidly changing in the locality of the project, particularly if labour is in short supply or material and equipment procurement and delivery are challenge. The Construction Manager will use knowledge of market conditions to provide advice on alternative materials and methods.

The Owner should however have the required knowledge, experience, advisors, and resources to choose, procure and administer the appropriate form of Construction Management contract and to assess and manage the different risk profiles.

4.0 Procurement of Construction Management Services

1. Procurement Methodology

The services of a Construction Manager can be procured through negotiation or by using one of the following methods:
• Best value method: A Request for Proposals (RFP) is issued to prospective Construction Managers. Qualifications, experience, and various other relevant factors, including cost of services, are taken into consideration in selecting the successful Construction Manager.

• Low bid method: The terms of the Construction Management services contract are provided to prequalified Construction Managers and the contract is awarded to the firm submitting the lowest compliant bid. Price is the only selection factor.

For Construction Management, the best value method is more commonly employed than the low bid method and is recommended as the method most likely to result in the best qualified Construction Manager being selected for a particular project.

2. **Timing**

The earlier a Construction Manager is engaged, the greater the potential benefits to the Owner and the project. Ideally, the Construction Manager is already engaged when the first budget is developed and at the point when the Consultant develops the conceptual design.

Team compatibility is essential to project success. Consequently it is recommended that the Owner select the Construction Manager and the Consultant sequentially, ideally with the Construction Manager selection preceding the Consultant selection. Some Owners may wish to give the Construction Manager a role in Consultant selection and possibly even in administering the Consultant contract(s) on the Owner’s behalf. But this should not be confused with Design-Build method of project delivery under which the Design-Builder contracts directly with the Consultant(s).

3. **Pre-Qualification of Construction Managers**

General contractors are best suited to provide Construction Management services because of their knowledge and experience in executing construction projects. However breadth and depth of qualifications and experience in the Construction Manager role may vary.

A separate pre-qualification stage in the procurement of a Construction Manager is highly recommended and is considered essential if the low bid procurement method is used. Under this process, a Request for Qualifications (RFQ) is issued by public advertisement or invitation and prospective Construction Managers submit information on their qualifications. The Owner evaluates the qualifications submissions and selects the pre-qualified respondents, who are then invited to submit more detailed proposals or bids, specific to the project.
CCDC 29 – A Guide to Pre-Qualification provides more detailed guidance on this process. Appendix ‘A’ to this guide provides examples of the types of information that may be appropriate to request in an RFQ.

4. RFP for Construction Management Services

A Request for Proposals (RFP) should disclose all of the primary criteria, weightings and scoring methodology that will be used in evaluating the proposals. Following is a listing of the criteria that might typically be used in evaluating proposals for Construction Management services (assuming no prior pre-qualification). Additional criteria could be added to the list or these criteria could be further broken down into subcategories. However, the criteria should be weighted and should be limited to those which can be characterized as either very important or having some importance.

- Experience as a Construction Manager, e.g. number, size and type of projects (confirmed by reference checks).
- Experience as a Construction Manager on projects similar in type and size to the one under consideration, e.g. number of similar projects with similar types of services required (confirmed by reference checks).
- Present workload; availability of resources.
- Relevant qualifications and experience of personnel available to be assigned to the project
- Safety record; safety program; safety certification.
- Financial strength and stability; bonding capacity.
- Cost management abilities (meeting budget).
- Time management abilities (meeting schedule).
- Ability to be innovative, solve problems, and provide value added design input.
- Ability to cooperate and function as a team player.
- Administrative abilities.
- Fee proposal (refer to 6. Compensation for Construction Management Service).

The RFP should assign a weighting indicating the relative importance of each primary criterion (or each major group of criteria). It is particularly important to state the weighting that the fee proposal (price) will be having in relation to the other criteria. The weighting given to the fee proposal should be weighted sufficiently high, relative to the other criteria, to ensure that pricing remains competitive.

The fee proposal should be required to address all aspects of the fee, including lump sum amounts, percentages, unit rates for labour and other items, and mark-ups on reimbursable costs and own forces work. The evaluation methodology that will be used (e.g. any minimum or mandatory criteria, the point scoring system) should also be clearly specified.
All weighted criteria should be incorporated into a scoring matrix to give them a quantified relevance to the selection process.

Appendix ‘A’ to this guide provides examples of the types of information prospective Construction Managers may be requested to submit. It is recommended that this information be requested as part of either an RFQ or RFP process (but not both).

The Owner may wish to limit the size of the Construction Managers’ submissions in response to an RFQ or RFP, by specifying a maximum number of pages that may be submitted. Provided the page limit is reasonable in relation to the information requested, this is considered an acceptable practice.

5. Selecting the Construction Manager

The selection decision should be based strictly on the criteria and methodology set out in the RFP. No additional subjective factors that were not disclosed to the proponents should be considered. The evaluation should be performed by an evaluation committee. Timelines for the evaluation process should be stipulated in the RFP and strictly adhered to. Submissions should be scored on their own merits, not necessarily in ranking against other submissions.

Requiring the fee proposal to be submitted in a separate envelope, and evaluating it only after completion of the evaluation based on all of the other criteria, is a good practice. It ensures that the fee proposal does not unduly influence the evaluation of the other factors unrelated to the fee.

An interview of the Construction Manager’s team should be a part of the selection process. Its purpose should be to obtain clarification and substantiation of information in the proposal, to then be factored into the previously established evaluation methodology. An interview should not be used to override, on a purely subjective basis, the results of the evaluation methodology.

It is good practice to give unsuccessful proponents the opportunity for a debriefing, to explain to them why their proposals were unsuccessful. The debriefing must not disclose detailed information about competitors’ proposals, how competitors’ proposals were evaluated, or other confidential information. Lessons learned should improve the quality of future submissions.

Some additional advice to Owners on Construction Manager selection that will help ensure a successful project:
• Construction Management is considered a professional service. The Construction Manager should be selected in the same way that other professionals (e.g. architects, engineers, project managers, legal counsel, etc.) are selected for the project team.

• Construction Management works best when the “project team” concept is followed. The Owner should select team members who are compatible and should establish clearly defined roles and responsibilities for all team members.

• A Construction Manager’s written proposal may not provide a complete representation of the firm’s business philosophies, integrity, and its range of competencies. An interview of the principals of the firm and all key personnel proposed for the project is recommended in all cases.

6. Compensation for Construction Management Services

The CCDC Construction Management contracts (CCDC 5A and CCDC 5B) each provide for a range of services (as described in Section 5.0) and allow for a “fixed price” component and a “cost reimbursement” component as methods of compensation for the services provided:

• The “fixed price” component is based on a pre-determined estimate of the Construction Manager's costs for a specific list of items covered by the fixed price, plus an allowance for overhead and profit. This “fixed price” may be a stipulated price, unit prices (e.g. wage rates on an hourly or monthly basis) or a percentage (e.g. percentage of total project cost), but its defining characteristic is that it is paid by the Owner irrespective of the Construction Manager’s actual costs incurred.

• The “cost reimbursement” component is paid based on the Construction Manager's actual costs incurred for those services and identified to be paid by this method, typically with a mark-up (usually a percentage) added on.

It is essential that there be a clear understanding between the parties with respect to which particular services will be covered by a “fixed price” and which will be “cost reimbursable”. Proper and comprehensive use of the Schedules accompanying CCDC 5A and 5B will help provide this clarity. The Schedules are designed to offer considerable flexibility to the parties in determining the method of compensation best suited for each service. This includes the possibility of remunerating similar services differently during different phases of the project, e.g. pre-construction, construction, and post-construction.
It is generally recommended that all off-site services identified in the contract be covered under a fixed fee, while all personnel assigned full time to the project, away from the firm’s head office or branch office (salaries and direct salary expenses) and all other costs and expenses incurred by the Construction Manager on account of the project, should be cost reimbursable.

Under Construction Management, it is not in the Owner's interests to have all services covered by a fixed fee. The more risk that the Construction Manager is required to assume under a fixed fee, the greater that fixed fee will necessarily have to be. This is because the fixed fee will include an allowance for the Construction Manager's risks. These risks may or may not materialize. If they do not materialize, the Owner will have paid more than if the Owner had assumed the risk.

Ideally, the risk associated with each service and cost item should be assessed and a decision made by the Owner as to whether it is best to include it in the fixed fee or as a reimbursable cost.

To ensure that price proposals can be fairly compared and evaluated, the basis for compensation should be clearly set out in the RFP or bid documents. This is best done by completing the appropriate Schedules from CCDC 5A or 5B and including them in the RFP or bid documents.

Construction Management fees should be considered professional services fees. When Construction Managers perform their work effectively, their fee will be more than offset by the budgetary, scheduling, value engineering, and other cost savings they bring to the project.

5.0 CCDC 5A and 5B Schedules for Construction Management Services

The CCDC standard forms of Construction Management contracts, CCDC 5A and 5B, each incorporate a Schedule A1, which identifies a number of Construction Management services for the project, including:

- General services at meetings and advice to Owner.
- Estimating services.
- Scheduling.
- Constructability.
- Recommendations for materials and equipment that should be pre-ordered.
- Assistance in bidding and contracting (only under 5A).
All services listed in Schedule A1 are necessary for the success for any project, above all one delivered under Construction Management, and should be provided by someone. Each of these services may be performed by the Owner, by the Construction Manager or by a third party (preferably a specialist in the service provided). The choice of service provider should be determined by the Owner, in advance of a Request for Proposals (RFP) or bid call to prospective Construction Managers, or known when the Owner and Construction Manager enter into contract negotiations.

Compensation (the Construction Manager’s fee) for the services identified in Schedule A1 is comprised of one or more of the following:

- a fixed amount for Construction Management services, or
- a percentage amount for Construction Management services, or
- based on time-based rates (the default compensation method) set out in Schedule C of CCDC 5A or Schedule B or CCDC 5B.

The Owner should determine and specify in the RFP or bid call the compensation method applicable to each service. Alternatively it must be negotiated between the parties.

Services of a similar nature are purposely grouped together so that they can be chosen only as a package, i.e. all or none of the services under the same group must form part of the services and fall under the same compensation method.

The services listed are divided into three phases of the project: pre-construction, construction and post-construction. Depending on when the Construction Manager is retained, some services listed under pre-construction services may not be applicable. A column marked “Not Applicable” is provided in Schedule A1 for this purpose. For example, a Class D Construction Cost Estimate (paragraph 1.2.1, Predesign Phase) may have already been prepared by others before the Owner and Construction Manager enter into a contract.

If necessary, the scope and details of some of the services can be expanded in Article A4 – CONTRACT DOCUMENTS. For example, with respect to project meetings in paragraph 1.1, the Owner may wish to specify meeting frequency, responsibility for chairing meetings and providing minutes, etc.

Schedule A1 to CCDC 5A and 5B are similar but not identical. The following articles appear only in CCDC 5A: 1.4.1 (4), 1.5.5, 1.5.6, 1.6.3, 1.6.4, 2.1.2, 2.1.3, 2.2, 2.3, 2.5 to 2.8 and 3.3.

In CCDC 5A, the services covered by these articles are usually performed by the Construction Manager, but not necessarily in all cases. In CCDC 5B it is assumed that these services will always be performed by the Construction Manager, the same as they would be by a general contractor, so they are covered in the General Conditions of CCDC 5B.
Commentary on Schedules

SCHEDULE A1 TO THE AGREEMENT – SERVICES AND COMPENSATION

Schedule A1 identifies certain Construction Management services grouped by phases and subject matter. This commentary is on the subject matter. The following services are a necessary part of any successful project and may be performed by the Owner, the Consultant, other specialist consultants, or the Construction Manager:

**Constructability:** The constructability related services identified in Schedule A1 may reveal during each successive design phase better choices and possible economies. This reduces re-work during the design and construction procurement phases and provides greater assurance of the project budget and schedule being met. Better procurement procedures and enhanced health and safety on the work site may also result.

**Contracting:** This includes the procurement related services required to solicit for Trade Contractors and suppliers, administer pre-qualification processes, if any, solicit, receive and analyse bids, make contracting recommendations to the Owner, and administer construction and supply contracts. As procurement and contract administration for construction differ markedly from other industries, a Construction Manager specialist in this domain should perform these services.

CCDC 5A and CCDC 5B differ in the extent of the services provided in the Construction Procurement phase and in the allocation of the risks involved. Under CCDC 5A, the Owner assumes the risks involved in the construction contracts entered into with the Trade Contractor. Under CCDC 5B the Construction Manager assumes those risks, as it is Construction Manager who contracts with the Trade Contractors.

**Cost Control and Accounting:** This includes cost monitoring, providing cash flow forecasts, advising the Owner of any deviations from the project budget, and recommending courses of actions or changes to maintain the project budget and schedule. It may also involve the recovery of any applicable tax rebates.

**Estimating and Cost Control:** Four classes of Construction Estimate are identified, in conformance with established construction cost estimating practices. As described in the Definitions, they range from a Class D Construction Cost Estimate based pre-design functional requirements to a Class A Construction Cost Estimate based on completed Construction Documents. Provision of Construction Cost Estimates and cost control activities, from the outset of the project and throughout the design process, will ensure that the Owner’s project financing is adequate and will identify any variations in comparison with similar projects and the Owner’s requirements. A budget based on proper Construction Cost Estimates will guide development of the project and suitable cost monitoring will ensure that the budget plan is followed.
General Services: These mostly cover communications related services including participation at meetings, advice, documentation, facilitating questions and answers, giving interpretations, making findings, and managing insurance and bonds. Communication is the backbone of team building and working as a team.

Payments to Trade Contractors and Suppliers: This service, identified only in Schedule A1 of CCDC 5A (included in the General Conditions of CCDC 5B) completes the procurement process by receiving and analysing billings and requests for progress payments, and recommending payment by the Owner.

Project Control and Scheduling: A project schedule is an important planning tool and a key to the success of any project. “Time is money” would be reason enough, but schedule planning will reveal logical sequences of activities and their durations. The project schedule will take into account all activities, their durations and resources required, and who is responsible for what, including financing, design, approvals, bid periods, fabrication of products, deliveries, construction, seasonal delays, etc.

The services identified in Schedule A1 cover an initial preliminary overall project schedule that will take into account most major activities and their durations, even before the schematic design phase. The schedule will be further detailed and refined as planning and design evolve. It will identify the date of Substantial Performance of the Work, the project-in-use date, and other project milestone dates. The services also include reviewing and updating the schedule, as the schedule is a plan that needs to be continuously updated and followed, from very early design, through bidding, pre-ordering and delivery activities, construction, to correction of the last construction deficiencies.

Any discrepancies between the planned schedule and actual performance should be identified and analysed in a timely fashion and suitable corrective actions should be discussed, implemented and their effects monitored. The schedule should be updated at a frequency agreed by the parties and any time there is a change that may affect project-in-use date.

The project schedule should also identify any necessary pre-ordering of materials and equipment, and facilitate timely Owner approvals for such pre-ordering.

Schedule A1 of CCDC 5A covers project schedule monitoring, updating and corrective actions during construction. Under CCDC 5B, these services are mostly covered by the General Conditions. Organization and procedures should be implemented as planned in the project schedule. Trade Contractors should be informed of the project schedule when bids are solicited. The Work should be coordinated in accordance with the project schedule, in consultation with all stakeholders. Performance reviews should be executed and actions recommended. Variances should be analysed and corrective actions proposed and implemented. Reporting should be done in a suitable manner to all concerned. The project-in-use date should be determined in cooperation with the Owner and Consultant and Trade Contractors should be informed in writing.
Changes in Work, Field Review, Health and Construction Safety, Submittals, Reports and Project Site Documents, Start-up, Substantial Performance of the Work, Project-in-Use Date, Handover and Warranties: These services are identified in Schedule A1 of CCDC 5A only and are largely self-explanatory. Under CCDC 5B these services are mostly covered by the General Conditions.

SCHEDULE A2 - REIMBURSABLE EXPENSES APPLICABLE TO SCHEDULE A1

Expenses related to the Construction Manager’s services, which can be estimated in advance by the Construction Manager, may be included in the Construction Manager’s fee, thereby reducing billing, tracking and accounting costs. Other services related expenses that are not easily estimated in advance should be separately reimbursable as indicated in Schedule A2 and in accordance with the relevant article of the Agreement, which also provides for an administrative charge on the reimbursable expenses.

Item 12 in Schedule A2 may be used to list other reimbursable costs incurred by the Construction Manager and which the parties intend to be cost reimbursable.

SCHEDULE B1 – ADDITIONAL SERVICES AND COMPENSATION

Schedule B1 (only in CCDC 5A) may be used to list other additional services the Construction Manager is required to provide. If required under Contract 5B, such additional services could be identified in a similar schedule.

SCHEDULES C and B - TIME-BASED RATES FOR PERSONNEL EMPLOYED BY THE CONSTRUCTION MANAGER (same Schedule in CCDC 5A and 5B respectively).

This schedule is intended to list the Construction Manager’s personnel by name or by category, trade or other employment designation, together with their applicable rates per unit (e.g. per hour, per day, etc.). If different rates apply to different times of day, different years, overtime or premiums, they must specifically detailed, with additional pages added if necessary.

Billable rates, which include labour burden, should be shown for named personnel, rather than actual salaries or wages.
6.0 Other Considerations for Construction Management

1. Publicly Funded Projects

Apart from the usual risks and responsibilities on any project, publicly funded projects carry with them additional requirements for accountability to the public. Cost efficiency and avoidance of any appearances of impropriety are of paramount importance. As such, Construction Management processes that are based on the principles of openness, fairness, and transparency are essential.

2. Own Forces Work By Construction Manager

The Construction Manager may perform construction work with its own forces. This typically includes, as a minimum, temporary facilities and services (e.g. hoarding, temporary heat, site office, power, water, security, hoisting, etc.) clean-up, miscellaneous cutting, patching, blocking, and other similar items not usually included in Trade Contractor scopes of work. Requiring each Trade Contractor to provide its own services in this regard would be inefficient and impractical, as would retaining a separate Trade Contractor specifically to perform this kind of work.

This work is typically remunerated on a “cost reimbursable” rather than a “fixed price” basis, and because it is performed by the Construction Management firm's own forces, is not subject to competitive bidding. The Owner should understand this and the role of the Construction Manager in it.

Apart from when a CCDC 5B contract based on the stipulated price option is used, there may be a concern about the potential for conflict of interest when the Construction Manager performs work with its own forces. Consequently, some Owners may choose to limit the kind or extent of work permitted to be performed by the Construction Manager's own forces, and require all remaining work to be competitively bid by Trade Contractors and suppliers. Owners should however recognize the efficiencies and added value provided by a Construction Manager’s own forces work that is managed and performed in an open and transparent manner.

In any event, cost reimbursable work performed by the Construction Manager's own forces and not competitively bid should be kept to a level that is in the best interests of the project. Owners should ensure the RFP or bid documents for the Construction Management services clearly define what work the Construction Manager is allowed to perform with its own forces on a cost reimbursable basis. And if the Construction Manager intends to do so, it should provide in its proposal or bid:

- labour rates,
- mark-ups on materials, and
• fixed costs for overhead and “general conditions” cost items.

If using CCDC 5A, the Owner should, in its RFP or bid documents:
• define what trade work the Construction Manager may bid on in competition with Trade Contractors and stipulate that the Construction Manager is not permitted to manage the bidding process for that trade work, including reviewing bids and awarding contracts, or
• request the Construction Manager to indicate what trade work it would be prepared to submit bids for.

If using CCDC 5B, the Owner should, in its RFP or bid documents:
• request the Construction Manager to identify which trade work the Construction Manager intends to bid on in competition with other Trade Contractors, and
• where the Construction Manager intends to bid on such trade work, require the Construction Manager to:
  o review the bid documents for such trade work with the Owner and Consultant,
  o disclose the Construction Manager’s intent to bid on such trade work to all bidders, and
  o publicly open all bids in the Owner’s presence,
  as required to ensure openness, fairness and transparency in the process.

3. Procedures for Procuring Trade Contractors

The parties should be aware that the Construction Manager’s roles and responsibilities under CCDC 5B (unless the stipulated price option is used) will give rise to the need for an enhanced transparency in the procurement of trade contractors, and the roles and responsibilities of the Owner and the Consultant will differ from those under Design-Bid-Build project delivery.

The process by which the Construction Manager solicits bids from and contracts with Trade Contractors should be fair, open and transparent. Any pre-qualification of Trade Contractors should be based on objective evaluation criteria. The Owner should require that:
• all Trade Contractor and suppliersubcontracts must be competitively bid and be subject to the Owner’s approval prior to award,
• the bidding process, the bids, the subcontracts and other records of the Construction Manager must be open to scrutiny by the Owner at all times, and
• the Construction Manager must discuss with the Owner and obtain contract security from Trade Contractors to the extent, and for the amounts, approved by the Owner.
All trade contract work that has not been identified in the Construction Management contract as part of the Construction Manager’s scope of work, to be performed by the Construction Manager’s own forces, should be put out for competitive bidding. If the Construction Manager intends to bid, or submits a bid, for such trade contract work:

- the scope of work, the bid documents and the bidding protocol for that work should be reviewed by the Owner and Consultant,
- the bid documents should disclose that the Construction Manager will be submitting a bid for that trade contract work, so the other bidders are aware of it before submitting their bids,  
- the bids should be opened in the Owner’s presence and selection of the successful bidder should be in accordance with standard industry practice, 
- the Construction Manager should not be permitted to inspect, interpret or certify its own work for acceptance, and
- appropriate Supplementary Conditions should specify that if the Construction Manager is the successful bidder, the Consultant will assume the role of prime administrator of the subcontract, including certification of payments and performance.
Appendix ‘A’ – Example of RFQ or RFP Information Request

1. **HISTORICAL INFORMATION**

1.1 How long has the firm and its principals been operating:
   1.1.1 in the construction industry, and
   1.1.2 as Construction Managers?

1.2 How closely does the firm’s experience and performance record match the Owner’s project requirements?

1.3 Does the firm have previous experience in the geographical area of the Owner’s project?

1.4 How much repeat business does the firm perform for the Owner or the Consultant?

2. **CAPACITY**

2.1 What are the firm’s present workload and future commitments, in terms of number of projects, percent complete, and construction cost volume? How do these relate to the firm’s total work capacity?

3. **CONTRIBUTION TO THE PROJECT**

3.1 What is the firm’s concept for the project and its philosophy of Construction Management for the project?

3.2 How well does the firm’s proposed list of services and responsibilities meet the Owner’s requirements for Construction Management services?

3.3 What is the firm’s knowledge of the current market, including:
   3.3.1 material costs and availability,
   3.3.2 labour conditions and union agreements,
   3.3.3 construction equipment costs and availability, and
   3.3.4 availability of qualified Trade Contractors?

4. **HUMAN RESOURCES**

4.1 What is the depth and organizational structure of the firm?

4.2 Is professionalism encouraged in the firm?

4.3 Is there a multi-disciplined staff available to solve the Owner’s problems? Resource staff should include experienced construction personnel, engineers and technicians in the structural, civil, mechanical and electrical engineering disciplines, as well as the general construction and architectural disciplines.
4.4 What Construction Management skills does the firm have in the following areas?

- Project Planning
- Project Scheduling
- Progress Reporting
- Project Estimating and Value Analysis
- Project Budgeting
- Project Cost Control
- Cash Control – Fiscal and Financial
- Commitment Control
- Project Documentation
- Bidding and Award Procedures (includes Procurement)
- Contract Administration
- Expediting
- Construction Planning and Administration
- Safety Administration
- Quality Control

4.5 What are the names and qualifications of all senior personnel proposed for assignment to the Project, both on and off site? Provide resumes outlining qualifications and experience.

4.6 If necessary, could key people assigned to the project be replaced from the firm’s current personnel pool?

5. SYSTEMS RESOURCES

5.1 What systems resources, matching the human resource skills noted above, are available for the following?

5.1.1 Planning
5.1.2 Cost Analysis (relevant to design alternatives -- value analysis)
5.1.3 Scheduling
5.1.4 Project Progress Reporting
5.1.5 Estimating and Budgeting
5.1.6 Cost Control and Cost Commitment Reporting
5.1.7 Cash Flow Control
5.1.8 Documentation (Does the firm possess documents and procedures for contract awards, administration and control of the construction process?)
5.1.9 Bidding and Award
5.1.10 Purchasing and Expediting
5.1.11 Construction Administration Procedures
  - Change Notices and Change Orders
  - Field Instructions
  - Transmittals
  - Labour Reports
  - Cost Change Verification
  - Claims Procedures
5.2 What systems and procedures does the firm propose for the Owner’s project? Have they been effective on similar projects?