



GUIDE TO HELP FEEL MORE IN CONTROL OF THE CONSTRUCTION PROCESS

Thank you for downloading Incite Design's Guide to help you better understand the construction process! Based on our experience and specific expertise in design, construction documentation and construction management, we have put this together to help you to achieve your aims and goals with your construction project. This guide follows a document-based approach- that is it works through the various phases of what a proposal from an architect or contractor might look like. As we go through the document we have put in explanations for what the different phases should encompass and what to look for.

Note- this guide is a general in nature and is not intended to cover all different scenarios in residential or commercial construction. If you have specific questions, we would be happy to help you get the answers you want.

Please let us know if you have any questions. We look forward to answering any questions you may have!

FIVE KEYS TO SUCCESS ON YOUR PROJECT

From the biggest new house project to a small interior renovation, your construction project will be an exciting but potentially unsettling process at times if you don't prepare yourself going in.

Based on our experience looking at past projects, here are 5 key things to make your project a success. [[Click here to listen to this online](#)]

1. **Understanding:** Take some time to look over the eight project phases below and understand how your project will move from one phase to the next. You don't have to understand all of the tasks that your designer and contractor will perform but knowing that for example, a structural engineer will likely be involved in phase 3 to determine if there are structural impacts will help you get a sense of who contributes what on the project.
2. **Objectives:** Work with someone to help plan your project early. And for best results that someone should be a person that can bring an outside perspective into the situation that will ask questions to help you prioritize your objectives for your project.
3. **Research:** Do research before the project starts by researching online at your favorite design blog, going to stores and talking to friends and colleagues who have gone through the process before. They can help give you a sense of what to expect and maybe even some things that worked successfully for them.
4. **Outlook-** This is an exciting process but things will come up that are unforeseen so it will require a bit of resilience and tenacity to help you maintain an open mind. Be ready to discuss solutions to help move the project forward. These might be a bit different from your initial thoughts but this is where the process can evolve and where something better can be created through discussion with your project team. Remember also that the members of your project team are experts in their specific areas but need contributions from you to help them understand what you want to achieve (see also 2 above).
5. **Participate:** Be ready to become an active participant and collaborator in the process so that builds on your understanding of what is coming next and the overall flow of your project.



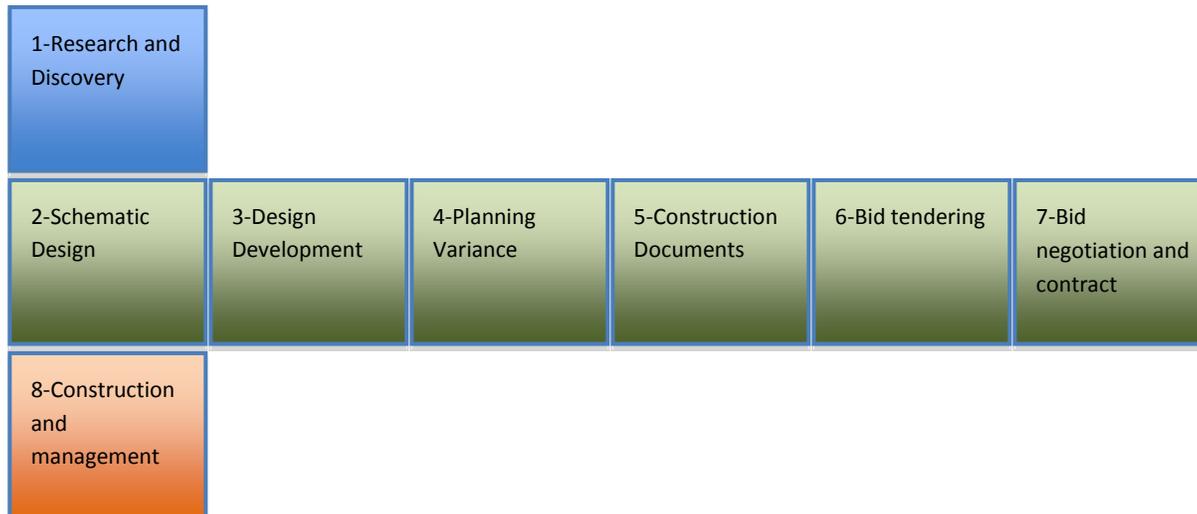
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PROJECT UNDERSTANDING

General:

Most projects have three main phases: planning, design and construction. In some cases you can engage a contractor to fulfill all phases or engage a designer (such as an architect) to handle the planning and design phase as well as supervising the contractor through construction. There are also other variations on the process that could have a team handling all the different phases which usually depends on the size and scope of the project



To start a project on the right footing your architect (or contractor) should spell out in writing what their interpretation of the project is up front, which is a reflection of a discussion about your needs. If you haven't had a discussion about your needs and are handed a proposal or contract, ask how their interpretation was put together. The essence of a successful project is a good understanding between you and your partners that should start out from the beginning with what you want to accomplish in the project (more on how to prioritize your needs later). Also great communication stems from trust – you need to be able to be confident in your partners in the process which includes how they respond when you ask questions to their experience and client referrals.

PROCESS AND DELIVERABLES

For most projects, the work process includes the following deliverables in a traditional process to get to a drawing and document set that can be submitted to a municipality for necessary approvals to obtain a Building Permit. For some projects the steps could be combined together. This is not to say that all design professionals will work in the exact same manner with the exact same deliverables. However, your part in the process should begin before you meet with an architect or contractor. There are many sources of information that can help you start to prioritize your thinking about your project. Things like design blogs, magazines are good sources for understanding the possibilities of using materials and fixtures in relevant ways that could apply to your situation. For example if you are renovating your kitchen you may find it useful to start looking at kitchen designs – not to look for an exact replica of your unique situation, but to get your mind thinking about possibilities.

At this point you should start to think about prioritizing your needs (e.g. do I need more counter space in my kitchen; does my bedroom have to face the morning sun etc.). This will help immensely in the first phase to determine how to work within the constraints of the project to ensure that the right things get focus. A solid grounding here will help you to save money later in the process as you can refer back to your original priorities when the inevitable “shiny objects” come at you later on.

1. Preliminary Research and Discovery Phase:

Through a series of initial discussions your designer should work to understand your needs and help to define and prioritize them. From these discussions they will begin to build a program for your project. The Program will identify the major spaces in the home, what relationship these spaces will have to each other, outdoor spaces, views, morning and afternoon light and so on. Additionally the program will determine the more pragmatic requirements such as the number of washrooms, bedrooms etc. and their relationship to major spaces.

While developing your program they should also:

- a. Gather all the background for the project [including what your preferences are (e.g. images from magazines or the web)]
- b. Research the site/zoning and regulatory frameworks
- c. Establish the strategy to best accomplish your goals within budget and timeframe
- d. Determine the full and final in-depth scope of the project

2. Schematic Design:

At this point your designer should begin to visualize the rooms and their relationships as they were defined in the program. One thing we have found that's effective is preparing colored block drawings for client review (item 'e' below) to confirm our findings and make sure we've included everything discussed as per the client's prioritized needs.

In this phase your designer should:

- a. Develop a conception of the main program elements (e.g. washrooms, bedrooms etc.) of the residence.
- b. Develop a conception of the house flow (e.g. how you would move from space to space)
- c. Refine the Program Document which summarizes what will be included
- d. Schematic Design and Consultation with clients

- e. Prepare a Schematic Block Plan Drawing Package for the client's review
- f. Prepare one round of Schematic Design revisions to be signed off by the clients

3. Design Development:

At this point in the process your designer should transition from colored blocks to plans and elevations. Identifying floor elevations, exterior finish materials, window locations and any potential issues impacting construction. They also start to add in consultant's input such as structural, mechanical and electrical to most effectively consider how to take best advantage of this development phase to find building efficiencies that might help accommodate these elements in the design. At this point your designer should begin to plan with you, at a high level, what some of the exterior and interior finishes will be.

- a. Design Development and consultation to refine the output of Schematic Design
- b. Preparation of two dimensional Design Drawings (plans and elevations)
- c. Determining exterior materials and obtaining material samples
- d. Co-ordination of site plan with surveyor
- e. Contracting of Structural and Mechanical Consultants required for structural design and energy efficiency permit requirements in most building codes.
- f. Preliminary coordination of design with structural and mechanical consultants for the purpose of sizing and coordinating the structural and air delivery systems to suit the building design
- g. Development of key details to make sure project is carried out to industry best practices
- h. Preparation and client review meeting of Design Development Drawing package for Design sign off
- i. Interior design and layout, material and color consultation and selection (e.g paint and tiles)

4. Planning variance process:

While it is often prudent to conform to the planning and zoning restrictions set out by the municipality, the need to pursue a planning variance may arise as a result of the scope of your project (e.g. that what you want to build is larger than what is set out in the zoning governing your lot) or restrictive site conditions. Restrictive site conditions might involve something like a "set back" which is the figurative line drawn a certain distance in from your property line.

If your are building new or adding on space the zoning of the property will give an available "coverage" measurement in percentage form. This calculation is based on the lot size and through a percentage calculation determines how much floor space can be built on the site. For example if your lot is 50 feet x 100 feet your lot area is 5,000 square feet. If the coverage is 30% that means that 5,000 x 30% equals 1,500 square feet above grade can be built / renovated under the current zoning. If your needs exceed that, then an investigation into your municipality's process for dealing with variances will have to be started. Without obtaining permission from the municipality to exceed this calculation a building permit likely will not be issued so it is prudent to understand the implications at the earliest opportunity.

In either case an application for a variance would be made to your municipality during the design development process. This is an established process that involves preparation of documents that demonstrate the areas that require the committee to consider for a minor variance.

- a. Your designer should prepare drawing sets tailored to the process for your municipality
- b. Attend the hearing to support your application

5. Permit and Construction Documents:

Once the design has been established your designer should begin to produce construction drawings. At this stage they will begin to transition the design drawings into construction drawings in conformance with your municipality's Building Code as well as with best construction practices. This is a fairly intensive stage that builds on the previous material so significant changes at this point can cause a ripple effect as all of the interactions between drawings and details have to be altered. Included in this phase is the:

- a. Finalization of details related to code compliance (e.g. how structure will be put together) as well as visual cohesiveness (interior design details)
- b. Continued coordination with Consultants to guide their preparation of Structural and Mechanical Permit Documents. There is usually several permits issued – Demolition, structural, mechanical, plumbing.
- c. Preparation of door and window schedules to show which windows go where. This also assists in getting pricing as doors and windows are one of the top 3 items in terms of total cost.
- d. Preparation of finish schedules (e.g. how each room is painted and other finishes)
- e. Contract Drawings: Plans, sections, elevations and construction details that describe building design for the purpose of building permit review, contractor pricing and subsequent construction.
- f. Specifications for describing performance standards for materials, equipment and constructions assemblies. As more emphasis is placed on energy conservation, the performance of systems to reduce energy consumption is being put in place.

6. Bid Tendering: Preparation, Review and Guidance:

Tender documents allow contractors to put detailed pricing to the construction of the dwelling. In addition to drawings and specifications there are bid documents that describe the terms of the bid, as well as the roles and responsibilities of the contractor, owner and designer through the construction phase. Careful preparation of these documents is essential in ensuring a successful tender.

During this phase your designer should:

- a. Prepare bid documents and terms of reference for tender
- b. Assist in prequalifying contractors for the bid.
- c. Arrange the tender

7. Tender, Negotiation and Contract Signing:

In each tender process there are questions from contractors during the bid that require clarification. Additionally once the tender closes there is reviewing of the bids that has to be done to ensure that the best match of price and value is present before the contract is awarded. One thing to note: if you analyze most construction nightmares you will find a common theme: the client was seduced by a low bid. If you are buying a television and you shop at different stores and you are accurately comparing the same model, size, year, features and one store has a lower price, not much should go wrong if you buy the less expensive television. It should be pretty much the same. However, when purchasing construction, you are never comparing apples with apples. Every builder builds differently. You need to work with your architect to determine what the contractor is bidding on and if there are any potential issues.



Your designer should:

- a. Field questions from contractors during bidding and issue clarifications
- b. Analyze returning bids and recommend awarding of a contract to the best-suited contractor.
- c. Assist on document assembly for signing and distribution to the contractor and sub trades

8. Construction Management

Most architects will develop a separate proposal for construction management. Without a design it is difficult to assess the scope of services that will be required in order to construct the project. As the design and documentation progresses the scope of these services can more easily be determined and an appropriate fee arrangement can then be proposed as additional services.

They will be able to give a price for:

- a. On-site project management visits to assist contractor with any questions and to act as liaison between contractor and clients
- b. Reviewing works for compliance to contract documents to ensure performance of contract with builder
- c. Review the progress of work and advise clients on contractor's billings

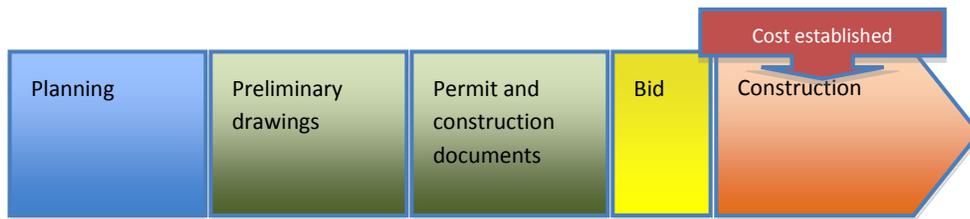
Through this entire process you should be in regular communicate with your architect or contractor so you can remain updated on the team's progress as well as provide input on the overall process.

FEES

There are no hard and fast rules or standard prices on construction projects. As so much of the work is labor there tends to be a large variation on pricing for jobs. Again, beware of a low initial fee to complete the work. While it is possible to find good value with contractors as well as your other project partners, a low initial fee may be a sign that there will be further unforeseen charges after you sign the contract. In fact, construction is not like buying a car – you pay for the services well in advance of the final product being delivered. That requires a lot of investigation and due diligence to ensure that you are going to get good value for your hard-earned dollars!

If you are hiring your own contractor, consider referrals, but try to go out and talk with some existing clients and see the jobs they have on the go. Unfortunately there is no foolproof way of making the right choice. But the more informed you are on the process and the more comfortable you are with your partners the better off you will be in general.

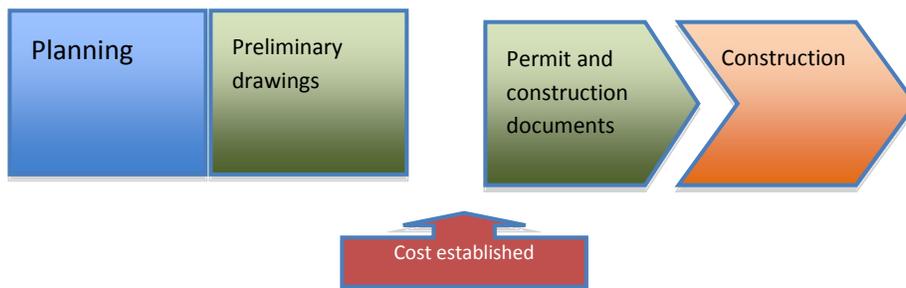
With the traditional bid method outlined above your designer prepares a full set of drawings and then fields bids on your behalf that respond to the drawings:



Fees are broken into several components. There are the fees for:

- Design and documentation (steps 1-7 above)
- Fees for the construction phase (the payments to the contractor)
- Fixtures and fittings (e.g. sinks, faucets, furnaces etc. which can be paid through the contractor if he is supplying these items or directly to a store if you as a client are supplying them)
- Consultants during the design process (Engineers and others depending on the complexity of your project)
- Landscape design
- Municipal fees (such as permits etc.)
- Construction management (as in step 8 above)
- Other disbursements such as additional drawing sets and travel expenses

Other practitioners such as design build firms choose to have the project bid at a different point in the process as the drawings are in production. Then the detailed drawings continue to be developed as the initial parts of construction take place. There's no right or wrong way to price a project and your partners can help decide what's right for you.



PAYMENTS AND SCHEDULE

Schedule

We tell our clients that to do a comprehensive job on the drawings (i.e. complete steps required to begin construction) to budget 6 -8 months*. If you are working with a tight deadline, there are things that can be done to complete the project sooner.

* Note time lines are dependant on many variables that can either reduce or increase the length of time required to complete a project. What tends to happen is that clients sometimes take longer than scheduled to make decisions (e.g. on the orientation of rooms or the number bathrooms required which can slow down the process and cost more money. Also your project may require engaging a separate decision process through the municipality to receive small variances based on the zoning of your property so this can also affect the timelines if not properly budgeted for in the timeline (see step 4 above).

Payment schedule:

A first deposit of 10-15% is usually be required upon signature of a contract of service between you and your designer. The remaining balance will be paid in phases throughout the development of the project based on specific milestones. For contractors, they can ask for up to 30% up front as a deposit to order materials although more than that may be something to investigate. Again payments in construction phase are usually done in milestones based on completion of the various phases of work (e.g. foundations, structure, windows and doors etc.) so its important that your architect determine if in fact as much work has been completed so you are not getting ahead of the payment schedule.



ABOUT INCITE DESIGN

Our Experience:

We have helped clients realize solutions that satisfy both their pragmatic goals and aspirational desires. Examples can be found throughout our [portfolio](http://www.incited.ca/portfolio) [<http://www.incited.ca/portfolio>].

We have worked on numerous, large-scale mixed-use complexes as well as smaller scale residential projects. Our unique approach, philosophy, and ethic of work have proven their efficiency throughout many projects, resulting in many long lasting successes.

Our Clients:

Incite Design's clients are proud to work with us. We will be able to provide contact info for our past clients.

Cutting Edge Design Approach & Client-Centered Philosophy

We strive to help our clients achieve their objectives working within a pragmatic framework. While we believe that state of the art design is something which will provide our clients with a great place to live for years (and allow the house to increase its value in the marketplace) we fervently work with clients to make sure that translating their needs remains the project's prime objective.

We specialize in translating what our clients say into projects that can be understood and executed by the many specialists and agencies that govern the building process. We speak a variety of 'languages' so our clients don't have to work to make themselves understood.

If you have any questions, please feel free to call me anytime at 416-477-5636, or to visit our website at www.incited.ca.

Thanks! I appreciate your interest and would be happy to follow up any questions you may have.

Best regards,
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