

DESIGN PROCESS

A GUIDE TO WORKING WITH TRAZA DESIGN

Below is an outline of the steps we'll be taking together as we design your home. This process is meant to be fun, engaging, and democratic. It will involve sketches, drawings, computer models, lots of ideas – both good + bad - materials, thorough analysis and good humor. We think the best outcomes are the result of following each of the steps below to completion.

Good design is the synthesis of many disparate ideas into a thoughtful whole, and while the steps listed below represent a linear path, the way we arrive at the final design isn't always linear. It's an iterative process, which leads to a product; it's not a known product from the beginning. The product is the result of following the design process to its logical endpoint. This, we believe, is what makes custom design so exciting and memorable – we create it together based on your specific situation and needs. At the end of the process, you'll have a thoughtfully designed home and the shared experience of designing it.

Designers, for the most part, all use a similar series of steps to arrive at a finished home. There are six general phases included within our **FULL-SERVICE DESIGN PACKAGE**:

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|----------------|--|
| Phase 1 | Predesign – site analysis, programming, existing conditions, budgeting, code review. |
| Phase 2 | Schematic Design – basic design concept generation. |
| Phase 3 | Design Development – refinement of the selected design concept from phase 2. |
| Phase 4 | Construction Documentation - detailed drawings, schedules + specs. |
| Phase 5 | Bidding (Contractor Selection) – aid in contract award / negotiation with general contractor. |
| Phase 6 | Construction Administration – oversee construction + administration of the contract. |

The phases are sequential, and they build on the work completed and agreed to in each preceding phase. We start with the general and refine the design to the very specific. There are a lot of decisions along the way and this gradation organizes those decisions into manageable portions.

Here's what to expect with each phase:

PHASE 1: PREDESIGN

This is essentially an information gathering and processing phase – what we do before we start designing. We collect all of the information about the project to use in schematic design. This includes information about the site, any existing structure(s), codes, deed restrictions, septic information, site utilities, access, budget, and schedule.

SITE ANALYSIS

The property, or site, is a strong generator of ideas and building forms for us, so we begin all new projects with an analysis of your site. We look at the local conditions - climate, wind patterns, solar angles, topography, and other significant features - particular to your property. We overlay any local zoning restrictions (setbacks, etc.) on this plan and create a site diagram. This diagram usually begins to suggest candidate building sites and opportunities, which together, we'll begin exploring in the next step.

PROGRAMMING + BUDGET ANALYSIS

The program is a designer's way of saying, "list of rooms". What will we be *programming* into your home? Chances are this has been percolating in your head for some time, but we need to get it on paper and make it real.

We'll ask you to make an exhaustive list of the spaces you'd like in your home to include. Treat it as a wish list of sorts (for now). For the major spaces, it's also useful to describe the character of those spaces (wood ceilings, cozy, formal, low light, etc.) If you have particular needs regarding sizes or adjacencies of spaces, i.e., "the main bedroom must be at least 30ft by 40ft", it would be great to know that up front. Otherwise, we'll develop and assign appropriately scaled spaces to your list of rooms as a starting point.

We'll apply square footage estimates to this list of spaces and assign estimated dollar values to the total project square footage. Together we'll compare the estimated cost of the home with your budget. If the two don't align we'll revisit the size + number of spaces for as long as it takes to reconcile the two. It's much easier to align your budget with the size of the home before beginning the design process. The schematic design will follow, fixing ideas and expectations into an image of a home. Once this happens it's much more difficult to give things up.

CLIENT SURVEY

We'll send you a detailed list of questions to help us find out more about you, your needs for the project, and as part of the search for an architectural idea to build the project on. This will get us all thinking about the specifics of design from the outset.

EXISTING CONDITIONS SURVEY (As Necessary)

These drawings are required for all renovation + addition projects and vary with the size and complexity of the existing building.

CODE ANALYSIS

It's critical to understand the restrictions governing the subject property or structure before beginning schematic design. This review will tell us what's possible and what isn't. We'll review the zoning, by-laws, and covenants which impact the property, review environmental issues, flood zones, and assess the overall permitting process. We will seek preliminary Planning Board, State Building Department and engineering review as required.

SCHEDULE

It's important to develop a basic schedule to make sure we're meeting everyone's expectations. The project schedule will be impacted by the following:

- Owner's Schedule
- Designer's Schedule
- Consultants' Schedules
- Permitting Schedule
- Contractor's Schedule + Availability

The schedule will change along the way we'll use it to identify any constraints early on.

INFORMATION REQUIRED:

- Site Survey (digital) - showing property boundaries, roads, test pit sites, utilities, topography, known significant site features, and any existing structures.
- Existing Structure Floor plans (digital) as applicable. If you don't have these, we will conduct an existing conditions survey for you.
- Soils test/septic design (assuming no public sewer access). we can suggest local designers that will work with us to find a suitable site (for both the building and the septic).
- List of any known restrictions (wetlands, permitting constraints, easements, etc.)
- Copy of your deed
- Client Survey – this is a document we'll provide for you to fill out. It's a detailed list of questions designed to tell us more about you, your project and to define the project goals in a very granular way.

This phase is complete when you've agreed to the program and budget we've developed together. Then we can proceed to the next phase.

PHASE 2: SCHEMATIC DESIGN

This is where the rough shape of the building and the ideas are formed. we'll generate a couple of different design options for you to consider - two at a minimum (sometimes more) - using all of the information gathered in the previous step. We begin by drafting a narrative for the project, called a 'parti', which we'll reference throughout the project. This seed idea is used to help us make decisions as the project becomes more detailed and better defined. It's a rulebook of sorts.

We generally present the schematic ideas on 2D site and plan diagrams or digital 3D models. These are not final ideas or fixed plans; they're meant to be conceptually evocative and to incite new ideas and feedback from you.

We'll meet and discuss the designs with the goal of narrowing the field to one preferred **design concept**; something we can move forward with. Often this design will borrow features from other schemes and become a hybridized solution. The phase concludes with your selection of a scheme to further develop.

At the end of this phase, we'll usually have the following:

- Schematic Site Plan
- Schematic Floor Plans
- Sketch Elevations / 3D Model
- Preliminary Cost Estimate

PHASE 3: DESIGN DEVELOPMENT

Taking the schematic plan developed in the previous phase, we begin to create the drawings digitally. We locate it precisely on your site and think about how it will relate to the existing contour and consider how that will shape the building. We make the building real by drawing the floor plan - the walls, windows, + doors, and stairs. We define the exact sizes and relationships of the rooms, the overall volume of the building and generate the initial set of exterior elevations. We also begin thinking about materials, inside and out. Eventually we'll know what every finish in every room is, but here we'll conceptualize the framework for the material palette. The buildings systems will be developed in this phase as well – structural, mechanical, heating, lighting, and specialty controls.

We'll usually meet to discuss the evolution of the design several times, each time refining the level of detail and decision.

CONSULTANTS

This phase initiates our coordination with the various consultants that will bring their expertise to bear on the project. Because the work we do is very specific, we almost always use structural engineers. They ensure that our homes perform to our design expectation.

Other consultants such as landscape, lighting or mechanical professionals can be brought in as necessary at this time.

At phase completion you'll have a set of drawings for what looks like a house, but not quite enough to build from:

- Site Plan
- Floor Plans 1/4"
- Exterior Elevations 1/4"
- Interior Elevations
- Structural Concept
- Lighting Concept
- Mechanical Systems Concept

PHASE 4: CONSTRUCTION DOCUMENTATION

This phase fixes all of the information about the house into a detailed set of drawings and specifications that will be used by the Contractor for pricing and construction. Think of it as an instruction manual. Before beginning we'll discuss whether you'd like to pursue a bid price contract, or a negotiated contract and we'll craft the drawings and level of detail in those drawings based on that decision. For a typical project, we generate the following drawings:

- Site Plan
- Floor Plan(s)
- Foundation Plan
- Exterior Elevations
- Building Sections/Wall Sections
- Door + Window Details
- Interior Elevations
- Details (interior/exterior)
- Electrical / Lighting plans
- Building Specifications
- Schedules (Door/Window/Hardware/Plumbing/Lighting/Finish/Appliance, etc.)
- Structural Plans (structural engineer will provide their own drawings)

Your contractor may submit the project for local permitting near the beginning of this phase to ensure any necessary changes can be folded in before the drawings are finalized. The local permitting process in Rhode Island is usually straightforward and simple. Complex sites may require an earlier start on the permitting process; however, this will be determined in the Pre-design phase.

The construction documents phase will require less input from you as most of the decisions will have already been made. If there are outstanding finish selections or cabinetry design decisions, we'll meet to confirm those.



PHASE 5: BIDDING (CONTRACTOR SELECTION)

This is a separate phase, but it typically occurs alongside other phases of the work, especially if the contractor you're seeking is in high demand.

BID CONTRACT:

We agree on two (or more) contractors to competitively price the construction documents. This results in a fixed bid price for construction based on the drawings and specifications, what we refer to as the contract documents. The bidders must be of equal quality because high-end custom builders and production builders will naturally arrive at different numbers and make the process less useful.

Bidding requires a tight set of drawings with no room for confusion or interpretation. Any undefined scope of work is an opportunity for a bidder to make an assumption (which is always based on cost) and that's an opportunity for a change order during construction. As you might imagine, these detailed coordinated drawings take more time to develop and will increase the design fee.

With a tight set of drawings, the materials are known quantities (windows, doors, finishes) and the only real differences between bids should be the individual builder's varying overhead and profit percentages. This number is typically a negotiated percentage.

The bidders will submit their prices and list of subcontractors to you and together we'll evaluate the bids and award the contract to the contractor of your choice. This does not have to be the low bidder.



PHASE 6: CONSTRUCTION ADMINISTRATION

After the project is awarded and construction begins, we act as your agent on-site, monitor progress, and ensure conformance with the contract documents. We don't tell the contractor how to do their work; we just make sure they are doing the things they are contractually promised to do.

This is a crucial part of the process, and we strongly advocate (YOU MAY REQUIRE INVOLVEMENT) being involved during construction. Not only does it ensure that all of the hard work we put into designing your vision is executed properly and according to the drawings we crafted, but we also find that it holds the Contractor to a higher standard of quality.

Invariably, there are things that we are just not able to draw or anticipate during the Construction Documentation phase. Involving us in the Construction Administration phase allows the project design vision to be integrated into the details of the home seamlessly. Designers and Contractors think very differently – which is good – but not every Contractor's decision balances function and aesthetics.

WEEKLY MEETINGS

We visit the site weekly to meet with the Contractor + Subcontractors to answer any questions and review progress + conformance with the Construction Documents. We will provide you with progress photos and send a weekly field report.

PAYMENT APPLICATIONS, CHANGE ORDERS, SUPPLEMENTAL INFORMATION

We review and certify the Contractor's payment requisitions and review any change order requests. For work that requires clarification or alteration we'll issue 'sketches' to facilitate the Contractor's work.

PROJECT CLOSE-OUT

At 'Substantial Completion' we work with the Contractor to generate a punch list and oversee its execution. And, at the end of the project a 'certificate of final completion' may be retrieved, and release of the final payment will be authorized.

This phase ends with the completed project, ready to move in.

FEES

All design fees are charged on an hourly basis. The cost of construction of a project doesn't determine the design fees, but it's a useful guideline in projecting how much design time may be needed to consider the project and produce the drawings. The full scope of design services, as described below, often falls within the range of 5% to 7% of the actual cost of construction. Note that this is the actual cost of construction, not the initial budget - often these are two very different numbers.

The nature of the decision-making process, Owner's directives, and the level of design input requested, all affect the overall fees. Therefore, fees can only be estimated at the start of a project based upon the potential size and complexity of the project and intended work.

It's extremely important that your budget for your home aligns with both the square footage desired and the estimated cost per square foot to build. For custom residential construction in Rhode Island, we use the range of \$170-\$230/SF. This is a big spread, some of which is dependent on the builder, some of which is based on the project complexity and some of which is based on the level of finish required.

We'll work with you early on to fine tune the list of desired spaces and their sizes and develop an initial estimated building cost. This will focus your decision-making process and help to align the budget with the size of the building. By doing this you'll have a more accurate picture of what our design fees will be. We like to involve a Contractor early in the process to provide local construction cost feedback that together we can rely on. We do not warranty, guarantee or certify the construction cost for the project or any part of the project, we only collaborate with Contractors who have an intimate knowledge of the (ever-changing) actual cost of construction.

WHAT'S INCLUDED?

While we love designing things, design is only one part of what we do on a project. There's a lot of communication that happens behind the scenes. We refer to this as project administration and its duties are spread across all of the phases of work. This is also billed hourly, and the estimate is included in the basic services fee.

We believe for a project to run smoothly open communication between everyone – Owner, Contractor, Designer, Consultants, Other Agencies - is extremely important. We pride ourselves on being an open communicator and always responsive to your questions. These administrative processes are in place to make sure your project runs efficiently on budget and on schedule.

Some examples of this project administration are:

- Phone, text, e-mail correspondence
- Owner meetings and presentations
- Meeting agendas + minutes
- Coordination of Consultant's work

CONSULTANTS

Our estimated design fees include the design services outlined in the phases below. They do not, however, include any outside consultant fees or other soft costs. Depending on the specific requirements of a project we may request to involve an outside consultant on a case-by-case basis.

Some examples of consultants we may involve on your project:

- Structural engineer
- Civil engineer
- Soil scientist
- Surveyor
- Landscape architect
- Energy modeler
- Lighting consultant

As the need for these specialized consultants arises, we'll work together to select the right person for the job and define the added costs up front.

HOW TO CONTROL COSTS

We recognize that designing a house can be an expensive endeavor and we are happy to work with you to manage these costs. A couple of things to prioritize when thinking about how to effectively control design fees:

- 1) Exploring more options. While a really enjoyable exercise for us, it can get expensive quickly.
- 2) Be up front with your goals, likes and dislikes. Designers thrive on critical dialogue so don't be afraid to be direct and candid. Without an honest, open dialogue the process can take longer to arrive at something you're happy with.
- 3) Match the size of your desired house with your budget. This keeps all parties working toward a singular goal. It's much easier to work early on to define a realistic house size that meets your budget than to try and remove money from an oversized house during the pricing phase.



FEE BY DESIGN PHASE

The phases of design services are listed below. Each category notes a percentage of time that we typically spend in that phase. These services along with reimbursable expenses are in addition to the estimated fee of 5% to 7% of the construction costs.

Phase 1:	Predesign	05%
Phase 2:	Schematic Design	15%
Phase 3:	Design Development	20%
Phase 4:	Construction Documentation	40%
Phase 5:	Bidding (Contractor Selection)	05%
Phase 6:	Construction Administration	15%
Total Design Fee		100%

HOURLY RATE

Our hourly rate ranges from **\$85-\$120/HR** based on the hours needed from either one of our drafters or designers. Drafters procure most of the production tasks while our designers procure the design and management tasks necessary to carry out a project.

REIMBURSABLES AT COST

LONG DISTANCE TRAVEL \$0.50/mile

PREDESIGN SERVICES HOURLY

Although all fees are billed hourly, Predesign services are particularly variable in nature. This variability is because each project begins with a different set of preconditions, some arrive knowing exactly what spaces they want, how big the home should be along with a clearly defined budget. Others are just beginning to take the necessary steps. The services below are discussed in more detail in the individual phase descriptions:

- Site Analysis
- Code Analysis
- Programming
- Existing Conditions Survey (as required)
Cost Range: \$0.25/SF - \$0.85/SF ~ Homes/Structures with smaller SF fall higher on the cost spectrum.

OTHER SOFT COSTS (not included):

Consultant Fees (Landscape, Civil, Structural, Lighting, Energy)
Site Survey (topographic, boundary – as necessary)
Septic Design



BASIC-SERVICE DESIGN PACKAGE

We understand that some projects require a less tailored approach and only need enough information to procure a permit/pricing set. For this reason, we also offer our **BASIC-SERVICE DESIGN PACKAGE**.

PACKAGE INCLUDES:

This service package provides our clients with a more streamlined approach, only focused on obtaining a permit/pricing set. A permit set is used to obtain a construction permit from your local building department. A pricing set can be the same as the permit set. It is utilized by contractors to provide their clients with a construction estimate for their project. This package is best utilized by clients who will be selecting and providing all materials and finishes for their project as well as opting to administer the construction project themselves.

Our Basic Service Design Package includes the following design phases with a cost saving of about 40%-50% less than our Full-Service Design Package:

Phase 1: Predesign	05%
Phase 2: Schematic Design	40%
Phase 4: Permit/Pricing Documents	50%
Phase 5: Construction Observation	05%
<hr/> Total Design Fee	100%

Phases 1 and 2 remain very similar to our Full-Service Design Package as the information collected during these phases is vital to any design or construction project; modification to these phases is not possible. The following two phases are a modification to the Construction Documents and Construction Administration phase previously described.

PERMIT/PRICING DOCUMENTS

Essentially a permit set is about half of the drawings a typical full-service project requires. The scope of work is not reduced, only the information provided in the drawings. After this phase, clients can be sure that their contractor may submit for a permit. Once a permit has been obtained, all the construction details remaining will be carried out by the contractor and client. All material selections will be described to be provided by the owner and installed by the contractor. Specific mechanical, electrical, and plumbing items will be categorized as design-build.

CONSTRUCTION OBSERVATION

This phase plays a small but very important role in the design process. This is a modification to the Construction Administration phase. Essentially between 3-4 site visits will be carried out by us throughout specific points during construction. These may include after demolition has been completed, after mechanical electrical, and plumbing rough ins have been completed (before insulation), and towards the end for the punch list. A punch list is a list derived by us for the client's use describing all of the items remaining to be completed by the contractor.

Clients will receive a Field Report describing our on-site visit throughout these construction milestones. Please note that clients will assume all responsibility for the administration required during construction. Our Field Reports are only meant to support clients during construction.



HOW LONG WILL IT TAKE?

DESIGN

The time it takes to complete the design portion of the work can vary from as little as a few months 3-6 (or more). It depends on the complexity of the scope of work, how quick you are to make decisions, how quickly we can come to a design solution that meets your needs and any special permitting or regulatory hurdles we face.

CONSTRUCTION

Again, this depends on project size and complexity as well as the Contractor's schedule and workload. You can expect it to take between 6 and 8 months (or more) for the average home project from start to finish.

OTHER QUESTIONS?

If there's something you're still wondering about, you can always reach us at:

Email: info@traza.design | Phone: (401) 244 5800

Or schedule a free consultation using the following link:

Book: [trazadesign/bookings](https://trazadesign.com/bookings)

OUR MISSION

Traza Design is a residential design studio that believes in providing our clients with modern and truly creative ideas. From programming to construction administration, we offer guidance and support throughout the entire design process. We work closely with clients to provide a cost effective and efficient design that will not compromise the project vision.

OUR VISION

We are here to provide residential design services with edifying interpersonal client relationships. We are committed to striving for creative, client-focused, cost sensitive solutions through a clear, straightforward, and effective approach in our designs.