

# Masterful Design Secrets for Your New Modern Day Home

by Bridget Puszka  
Senior Design Architect BP Architects



St Kilda House, designed by Bridget Puszka, BP Architects

**Discover How to Make Your New Home  
a Beautiful Comfortable and Healthy Home**



BP Architects design beautiful homes  
Sustainable, energy-efficient and comfortable  
Creating healthy low chemical living environments

# About the Author

## Bridget Puszka



**Bridget Puszka is the Senior Design Architect and Company Founder of BP Architects.**

Hello, I'm an architect who loves designing healthy, sustainable homes. I established my business BP Architects in 2000 to do just this, and I have been designing energy-efficient healthy homes for my clients ever since.

Each home is different, depending on my client's needs. For example, one of my clients wanted an energy-efficient underground house to live safely in the bush in the flame zone.

Another client loved the colours blue and orange and required an electric wheelchair to get around. So, I designed a beautiful, comfortable, colourful and unique sustainable home for him and his wife in inner-city Melbourne.

Your home is one, if not your biggest asset. The right house design is essential if you want a comfortable home in winter and summer with low energy bills.

To design homes that respond to the climate requires knowledge. And this knowledge is what I have gained from studying for a Master's degree from the University of East London, a Bachelor's degree from Melbourne University, Passive House training, Green Plumbing training, Victorian Residential Efficiency Scorecard, FirstRate House Energy Rating and more.

I'm also proud to say that my house designs have won numerous industry awards in acknowledgement of the success of my house designs.

# Contents

<b>Introduction</b>	<b>6</b>
Illustration 1. Flow Chart for the Architectural Design Process.	7
 <b>Chapter One What is the Design Process?</b>	 <b>9</b>
What do You Value in Your Future New Home?	10
Mike and Liz's New Home	11
 <b>Chapter Two Why is the Design Process Necessary?</b>	 <b>12</b>
Invest in Your Home	14
Mike and Liz s Neighbour's New Home	15
 <b>Chapter Three Stage 1. Home Brief and Budget</b>	 <b>16</b>
Your Wish List	17
Your Budget	18
Contingency Sum	19
Architects' Site Visit	20
Site Conditions and Building Requirements	20
 <b>Chapter Four Stage 2. Design</b>	 <b>21</b>
Concept Plan	22
Passive Solar Design	22
Sketch Design	23
Construction Costs Estimate	23



Entrance and Courtyard, St Kilda House  
Designed by BP Architects  
Image realestate.com

# Contents

<b>Chapter Five Stage 3. Construction Documents</b>	<b>24</b>
Do You Need a Town Planning Permit?	25
What are Overlays?	25
What is Town Planning?	25
How do Town Planners Decide on Approval?	25
How Long Does it Take to Get Town Planning Approval?	26
What do You Need for a Town Planning Application?	26
Building Permits	27
<b>Chapter Six Stage 4. Tendering and Builder Selection</b>	<b>28</b>
What is Tendering?	29
Tendering Your Home Project	29
What are the Tender Documents?	29
Choosing Your builder	29
What Affects the Tender Price?	30
What to do if the Tender Price is Higher than Your Budget?	30
<b>Chapter Seven Stage 5 Contract Administration</b>	<b>31</b>
<b>Chapter Eight Case Study - Architectural Design Process</b>	<b>33</b>
Mark and Dorothy's Beautiful Colourful and Sustainable Home	34



Entrance and Deck, St Kilda House  
Designed by BP Architects  
[Image realestate.com](http://Image.realestate.com)

# Contents

## **Chapter Nine How Do You Choose the Right Architect? 40**

How Architects Charge their Fees 42

How BP Architects Charge Fees 42

## **Chapter Ten How are BP Architects' Designed Homes**

### **Different? 43**

Unique and Innovative Homes 44

Healthy Homes 44

Green Homes 44

The Science of Sustainable House Design 45

Designed for your future self 45

### **Conclusion 46**

### **Appendix A 48**

### **Resources 49**



Entrance and Deck, St Kilda House  
Designed by BP Architects  
Image realestate.com



# Introduction

Five Main Stages of the Architectural Design Process  
Illustrated in a Flow Chart

# Introduction

There are five main stages of the architectural design process. The five stages of the architectural design process are:

- Stage 1. Your New Home Brief and Budget**
- Stage 2. Concept, Sketch and Design Development**
- Stage 3. Permit and Construction Documents**
- Stage 4. Tendering and Your builder Selection**
- Stage 5 Contract Administration and On-Site Inspection**

Each stage of the design process requires the completion of several steps before moving onto the next stage. The flow chart below illustrates the stages and steps of the architectural design process.

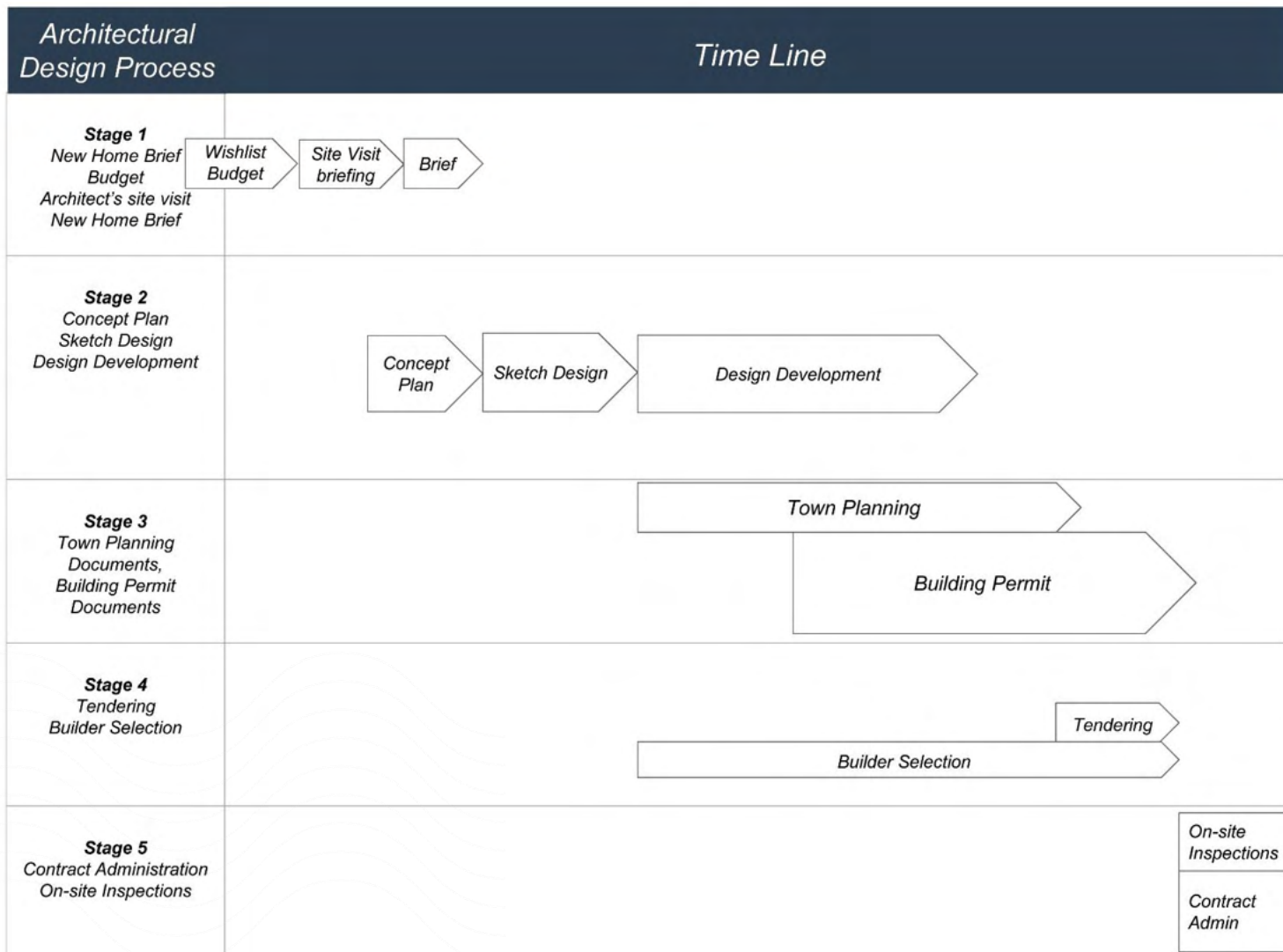


Illustration 1. Flow chart for the architectural design process.  
 NOTE: You may not need Town Planning Approval

# Introduction

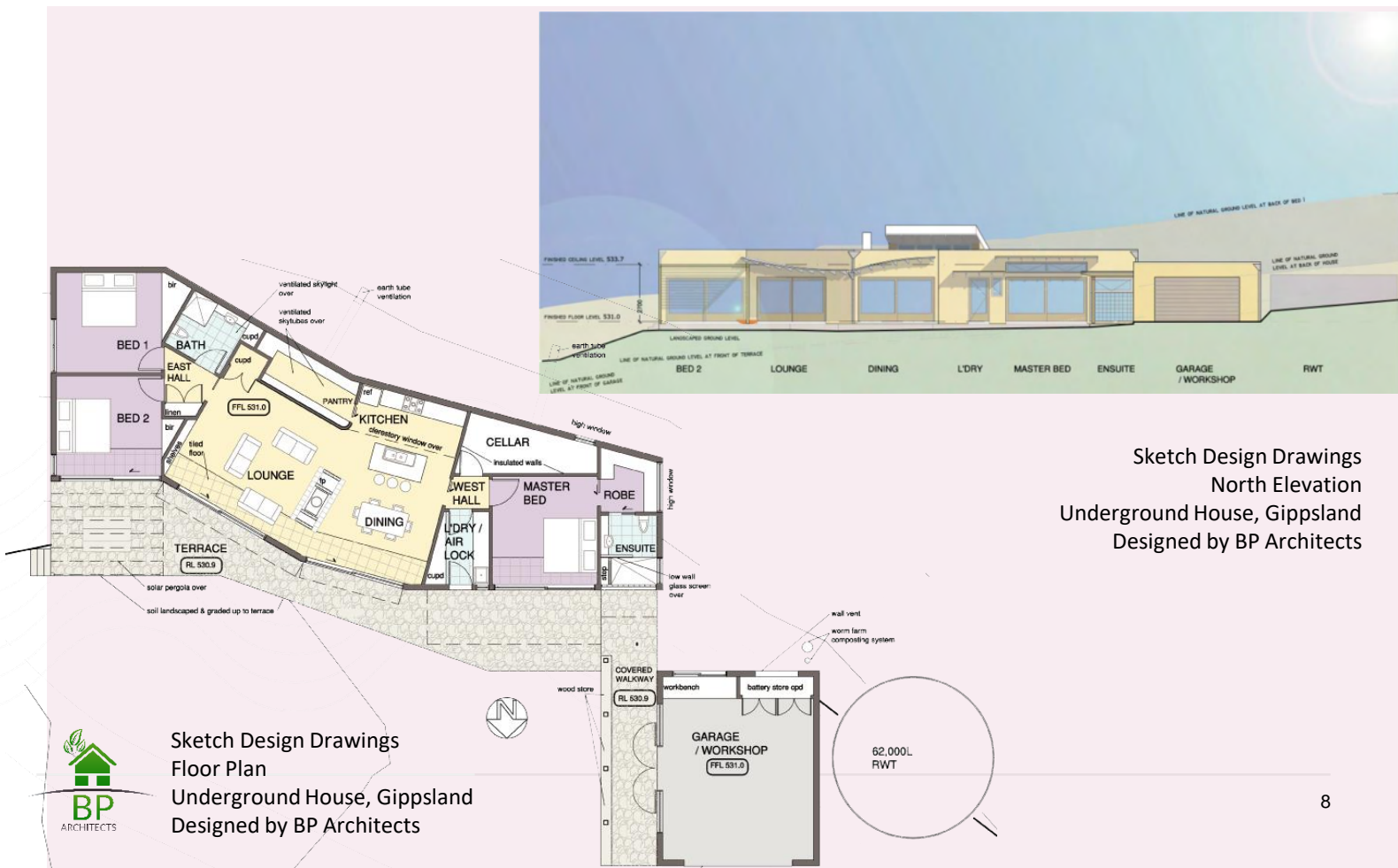
Each step of the architectural design process involves meeting your needs for your new home and the requirements of your Title, Council, Building Regulations and Building Standards.

Your architect can help you with all stages of the Architectural Design Process or with one stage. For example, you may want your architect to design your home and not assist during construction.

Every architect's design approach is different. An architect may design in a style that appeals to you. Or you may want an energy-efficient and self-sufficient, sustainable home. Choosing the right architect for your home project can make all the difference.

To have a great home, you need a good architect and a good builder on your team. That is why the builder selection shown in the flow chart spans a long time, starting at the sketch design stage.

When you have your new home's sketch design, you have drawings that you can show a builder and start the builder selection process from an early stage.







## CHAPTER 01

# What is the Design Process?

Why Have an Architectural Design Process?

Includes a Case Study for a House on Phillip Island, Victoria

# What is the Design Process?

Architectural designs produce beautiful and appealing homes that are both functional and practical.

Instead of leaving it to chance, following a process lets you take control of how your home will look and cost.

Working through the process makes sure that you end up with the best architect-designed house to suit you and your family.

The design process is a conceptual process that takes your ideas for your new home and makes them real.

To use an example, for my first meeting with Jack, my client, he presented a cardboard model of his future house.

Jack said that he wasn't sure what to do with the roof on roof area of his model house.

When I showed him the Concept Plan and the Sketch Design drawings for his future home, the drawings did not show a replica of his house model.

His house model provided me with information as part of Jack's wish list. Jack said that

*"I took their ideas and made them so much better."* Jack, Sunbury eco Home

The architectural design process starts with your ideas and dreams for your new house and what is important to you in a home.

## What do You Value in Your Future New Home?

Is having a window seat for the early morning light important to you?

Are the views from your home vital to you?

Do you want a feeling of openness and spaciousness in your new home?

Is an intelligent home what you want? Is it critical that you have an energy-efficient, sustainable home to match your eco-friendly life?

Knowing what is essential to my clients for their future new home lets me design these aspects into their home from the get-go.

Along the way, through each step of the architectural design process, it is exhilarating to see ideas take shape.

Having your home designed to suit the way you want to live is transforming, knowing that you can live your best life.

This intangible excitement of seeing your ideas become a reality is an uplifting experience.

It's an opportunity to create a novel, practical and beautiful home that enhances the quality of your life.



# What is the Design Process?

## Mike and Liz's New Home

Standing on a hillside in the beachside township of Phillip Island Victoria, we see the start of Mike and Liz's new house.

Looking over the steel platform, the builder and fabricators assemble what will be the base of their home.

It will provide a solid foundation for their house with thick bracing and reliable steel members.

One can't help but notice the excitement and energy of the builder and fabricators as they work on-site. They know they are building a house that is not the average standard house.

Mike and Liz chose a house site that had bay views on one side and ocean views.

Having views of the ocean and bay was essential to them in their new home.

Mike and Liz looked at kit homes, Project homes, and other design-build homes and found none of the houses would give them the ocean and bay views they wanted.

Plus, they discovered that although the houses they looked at were initially economical to build, the price substantial increased once you added the extras they wanted, like decking and a driveway.

Mike and Liz went to and fro, trying to work out the best way to get their ideal holiday home for their budget. In the end, they asked me to design their holiday house.

They planned their holiday house as the home for their retirement. So it was important to them that they got the home they wanted.

We watched over their site that day as the builder was busy pouring concrete to support the steel-framed footings.

The steel frame foundation was necessary for their house because of the slope of their home site and structural spans.

We could see that this steel frame was something new. The galvanized posts and beams were solid with heavy cross bracing.

Their neighbours walked past their home site to see what was happening and what would be next.

Everyone was excited. Mike and Liz were happy and excited at seeing their home starting to take form.

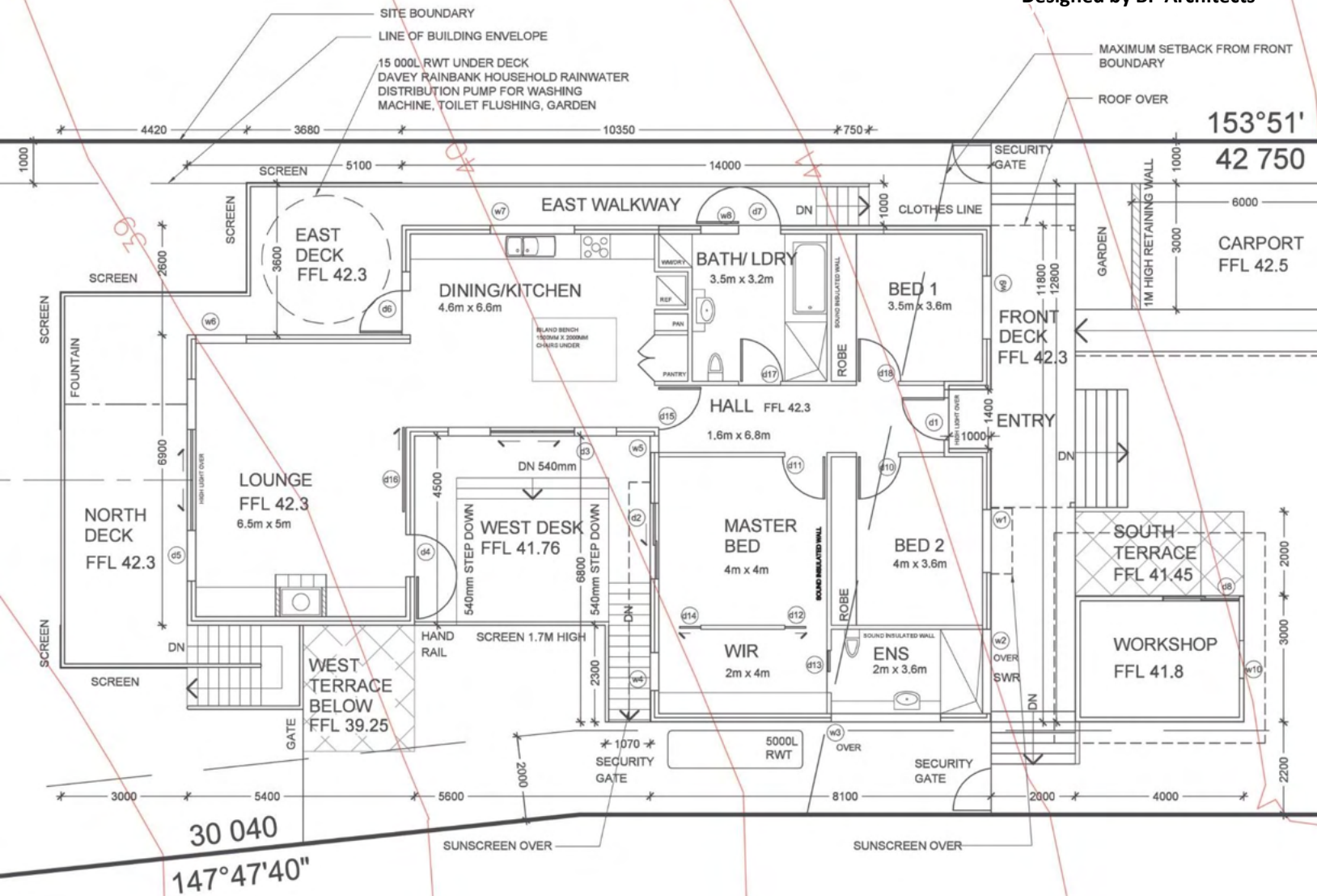
The builder was excited to be building a home that would look great and proud to say he built the house.

The fabricators were excited about their part in fabricating the steel frames.

This intangible feeling of excitement of creating something new is a significant part of the architectural design process.







## CHAPTER 02

# Why is the Design Process Necessary?

How the Architectural Design Process Benefits You



# Why is the Design Process Necessary?

Many people will find a house that appeals to them and that they want to buy. They could buy a home off the plan, a kit home, a project home, or a place already built.

They could find a builder who will design-build their home

Or they might know what they want in their new home and have a draftsman draw up the documents for a building permit.

In these cases, you do not need a custom-designed home by an architect, and the architectural design process is not for you.

But if you are like Mike and Liz and want a custom-designed energy-efficient home to suit your needs, then the architectural design process helps you get the home you want.

Mike and Liz had built a home previously in Sorrento. So their Phillip Island home was not the first home they had built from scratch. They also have renovated two other houses, so they both knew something about building a home.

They wanted their new Phillip Island home to meet their future needs and liveability was important. Mike is an experienced tradesman, and Liz works in the medical field.

Despite their experience in house building, going through the architectural design process and building a custom-designed house made them aware that there was a lot that they didn't know about when it came to building a home.

The New Home Masterplan in Appendix A shows the design aspects for a great home. Starting with your dreams, wish list and budget, combining the reality of Title Restrictions and Council Requirements. Before including other design aspects into your home design. Having an excellent home design makes a difference.

Your home is a valuable asset. Building a home is an expensive process, and you want to minimize the costs of building and avoid costly mistakes. At the same time, you want to maximize your investment in your new home, so you get the best return on your investment dollar.

The advice and experience of an architect help you make the right choices. You pay to build every square meter of your new home.

So if you have an efficient floor plan, you know that there is no wasted space and wasted dollars.

The rooms in your house are designed for comfort so that they are not unpleasantly hot or overly cold. This way, you comfortably use all of your homes rather than avoid excessively hot or cold rooms.

The design of your outdoor living areas provides extra living space protected from the elements so you can enjoy these areas without the cost of building additional rooms.

The architectural design process saves you time and money.

*“Together with Bridget, who was always the voice of reason, I focused once more on what was important to Me”*

Bev, Allergy-free Warraquul Home

# Why is the Design Process Necessary?

## Invest in Your Home

A home architecturally designed and custom-built is an investment in a quality home.

The money you invest in your home improves in value, giving you a good return on your investment dollar.

In addition, you get to live in a beautiful, comfortable home that suits your lifestyle.

The architectural design process is necessary because the design of a house is complicated.

As you work through these complexities, the step by step architectural design process helps you achieve the end goal of the home you want.

There are many things to consider in a home, and you want to get it right.

Following an architectural design process means that you don't overlook any critical aspects of your home's design.

Architectural sketches and drawings are an easy way to see that your house design will suit your needs.

Conceptually you apply creative and practical ideas with the wisdom of good choices within the constraints of a budget.

Understanding your new home design also lets you provide valuable feedback to your architect on your proposed house design. This feedback keeps you in control of your future home.

*"We have been very impressed with Bridget's design - from her first draft to the final product.*

*She has always listened carefully to our suggestions, either amending drafts or providing a better alternative.*

*During the process, we felt that we had "ownership" of the house and its design.*

*At no stage did we feel as though it was the product of an architect's whim and fancy"*

Brian and Julie, Cheltenham Home

# Why is the Design Process Necessary?

## Mike and Liz's Neighbour's New Home

When I met with Mike and Liz at their home site in Phillip Island, they said that their neighbour John who lived opposite them, wanted to sell his home.

John wanting to sell his newly completed house was a surprise. His home is in a new estate, and he had just finished his home. In two weeks, he decided that he didn't like living in his house anymore.

John's house is a two-storey house situated on a hill and gets the full brunt of the wind from the ocean. He finds that when the wind blows, his house shakes. The impact of the wind on his house is the main reason John wants to sell his existing house and buy another home nearby.

Before designing Mike and Liz's house in Phillip Island, it was evident that the wind would significantly impact their house. The Wind Rose for their home site showed that they had strong south-westerly winds from the ocean side.

In addition, there are north-west winds from the bayside of their house site. Both of these directions offered fantastic views.

No matter how amazing the views are, if you are cold and uncomfortable with a strong ocean wind battering you, it will not be long before you seek shelter from the wind. Or, in John's case, think of selling up and moving elsewhere.

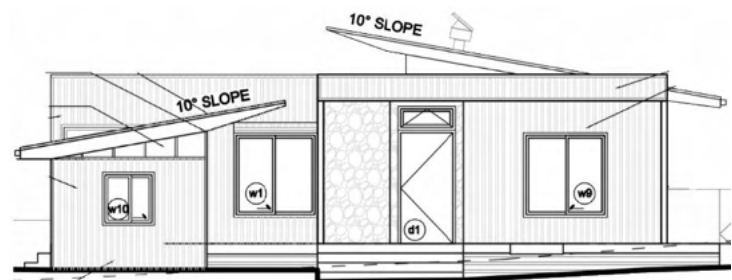
In Mike and Liz's Home, they have a protected courtyard on the west side of their home, and if the winds are strong from the southwest, they have a protected north facing deck to take in their bay views.

The sloped roof design of their carport deflects the north-westerly gale winds up and over the roof of their home.

Deflecting the wind stops the cold wintry winds from whipping off heat from the external walls of your home.

Designing for the impact of wind is one aspect of the architectural design process.

You can have a comfortable home with views despite the wind raging outside. You don't have to have a house that shakes from the brunt of the wind.



Sketch Design  
Mike and Liz's New Home  
Designed by BP Architects  
Drawing by Bridget Puszka



## CHAPTER 03

# Stage 1. Home Brief and Budget

Your Wish List, New Home Brief, Budget  
and Other Monetary Matters



# Stage 1. Home Brief and Budget

Each stage of the architectural design process has a start and finish. So you know you can quickly proceed to the next step, having signed off on the previous stage.

Having a process to architectural design means you confidently move through each step towards your ideal home.

Without an architectural design process, it would be easy to miss some critical decisions. And you might not make the right choices for the best home design to suit you and your family.

If you are struggling to be confident in the outcome of your new home plans, this is because there is no process in place.



Quote by Andrew Murphy

## Your Wish List

The first step starts with your vision for your home. The way you envision your home to look and feel like and the critical aspects of home life for you.

Your Wish List can be images, notes, ideas, thoughts that you consider relevant to your new home. You put these together in your Wish List.

Your Wish List is the basis of your new *Home Brief*. Your new *Home Brief* prepared by your architect makes sure that everyone involved knows what you want for your new home.

Communicating your ideas and wants for your new home lets your architect understand what is important to you in your new home.

The houses designed for my clients are unique and individual, as are they.

Colin and Libby wanted a strawbale house for their house site in Gippsland. Libby worked as an Environmental Manager, and Colin is an engineer. They planned to retire and harvest native pepper on their property.

Colin said they chose me to design their new home because he could see that each house I designed was unique and innovative.

*Colin said that all the houses I designed were different, and he could see that I worked closely with my clients.*

# Stage 1. Home Brief and Budget

## Your Budget

Everyone needs a budget for their new home.

And everyone wants to spend as little as they can to build their home and within budget.

Equally important is that your new home meets your expectations, feels and looks terrific and is a house that makes you feel proud.

From this point of view, you want to spend the most so that you and your family benefit from living in your new home and the lifestyle it brings.

So how do you bring this together in your budget for your new home?

To start with, you have to find out how much your new home will cost to build. You don't have a floor plan or know even how big your home will be at this stage.

As an architect, I am not the builder who builds your home. No two builders will charge the same price to construct your home.

If a builder is busy, he/she will not price competitively. Different builders have different profit margins. The price of steel varies in the Market.

So there are a lot of variables that need working out to set your budget.

All the same, I provide my clients with an indication of construction costs.

The opinion of probable costs allows my clients to decide at an early stage if they can afford to build their home and how much it may cost.

*“The approximate cost  
Bridget detailed was very  
close to some of the quotes  
we received from builders.”*

Brian and Julie, Cheltenham Home

**DON'T  
DOWNGRADE  
YOUR DREAM  
JUST TO FIT  
YOUR REALITY.  
UPGRADE YOUR  
CONVICTION TO  
MATCH YOUR  
DESTINY.**

Quote by Stuart W. Scott

# Stage 1. Home Brief and Budget

Once you have your sketch plan drawings finalized, you can start talking to builders about how much they would charge to build your home.

A quantity surveyor or building cost estimator can also provide you with a building cost estimate.

Your new home is a valuable asset, and once completed, you realize the value of your investment in your new home.

You want to get a great return on your investment if you decide to sell and not overcapitalize your new home.

Preparing a realistic construction budget reduces financial stress and pressures.

You can look forward to enjoying your new home without cost blowouts and the pain this brings.

## Contingency Sum

A contingency sum of money is an amount of money available for unseen costs that will arise during construction.

The contingency sum is ten to fifteen per cent of the cost of construction.

Having a contingency sum of money set aside means that you have the funds to pay for additional unforeseen items during construction.

If you are building your home, a contingency sum can be a great stress breaker.



# Stage 1. client Brief and Budget

## Architects' Site Visit

Visiting your home site lets your architect look for opportunities to improve your house design.

Vegetation, climate, topography and surrounding buildings all influence design decisions for your new house.

For example, with Mike and Liz's new home built in the coastal township of Phillip Island, Victoria, it was apparent from the site visit that the site topography and the wind would significantly impact the houses built on the hill.

Wind will whip off ten per cent of the heat from the external walls of a house.

## Site Conditions and Building Requirements

Setbacks and height limits are some of the site restrictions that can impact your house design.

You may have an easement or zoning requirements on your Title.

Local councils may have by-laws limiting the size of buildings on your site. There may be limits, so you can only build on 50 per cent of your land.

If your house is in an estate, there may be rules on what you can build as conditions on your Title.

These conditions range from the type of materials you can develop your house from, the style and look of your home, the exterior colours and even fencing.

Town planning requirements will impact the look of your home. Town planning may affect the exterior colours of your home. Or you may find that you have to screen your windows or deck to prevent overlooking your neighbour's property.

Town planning rules apply to your home site even if you do not need a town planning permit.

Building regulations influence your house design.

Meeting energy efficiency requirements of the Building Code affects your windows' size, type, and orientation.

So building your new home may not seem as straightforward as you may first think.

All the same, this critical information about your site and building restrictions let you make informed decisions about your new home.







## CHAPTER 04

# Stage 2. Design

How Design Adds Value to Your Home

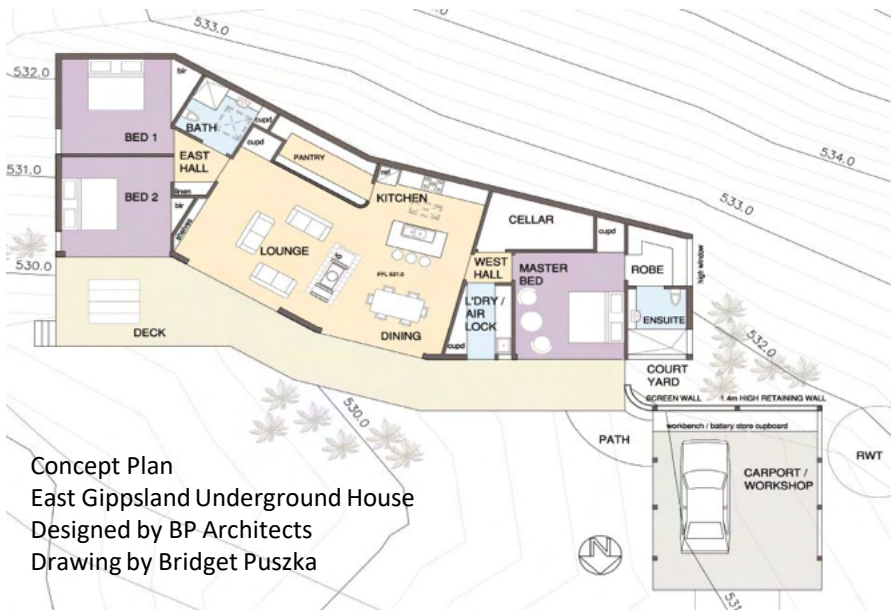
# Stage 2. Design

## Concept Plan

There is great joy and satisfaction in having your home designed for your needs and tastes. We have all lived in houses where we have had to adapt to suit the house.

Your Concept Plan design presents the ideas for your new home in an easy to understand way.

The Concept plan incorporates your Home Brief, budget, home site and Title restrictions and planning requirements all in one diagram.



*If you want to have a comfortable home all year round, optimize your home for passive solar design.*

## Passive Solar Design

We know the different ways the sun travels in winter and summer. And we can find out which wind directions will most affect your home.

So it makes sense to design your new home to make the most of the warmth of the sun and the cooling breezes in summer.

Designing your Concept Plan to take in the sun's warmth in winter and shade from the sun's heat in summer sets the footprint for a comfortable home.

Passive solar house design is most effective when you optimize the house design from the beginning.

North facing windows lets the winter sun stream through your windows to warm your home.

Hot air will naturally rise and layer near the ceiling. Allowing hot air to escape from high windows in summer is an easy way to cool down a home.

Having a ceiling fan with a reverse cycle will help move the hot air down to where you are sitting.



## Stage 2. Design

Air conditioners and heaters use energy, and they do not provide the comfort or satisfaction of making the most from the warmth of natural heating or relief from the sun with cooling breezes.

A cool breeze can make the difference between feeling very uncomfortable to finding the room temperature tolerable.

Having windows and doors set up to catch the cooling breezes is gratifying on a hot summer's day.

*Passive solar design improves and enhances the design of your home.*

### Sketch Design

The next exciting step in the Design Process is the sketch design of your beautiful new home.

Elevations and sections of your home developed at sketch design show you the appearance of your new home.

You start to get a look and feel for your new home and the size and cost.

Being involved in every step of the architectural design process allows you to give valuable feedback so that your home is custom design specifically for you and your family's needs.

### Construction Costs Estimate

A building estimator or a quantity surveyor can estimate the construction costs at the sketch design stage.

They can prepare construction costs based on the sketch design drawings so that you can decide at this stage if you want to proceed or if you need to modify your new home plans.

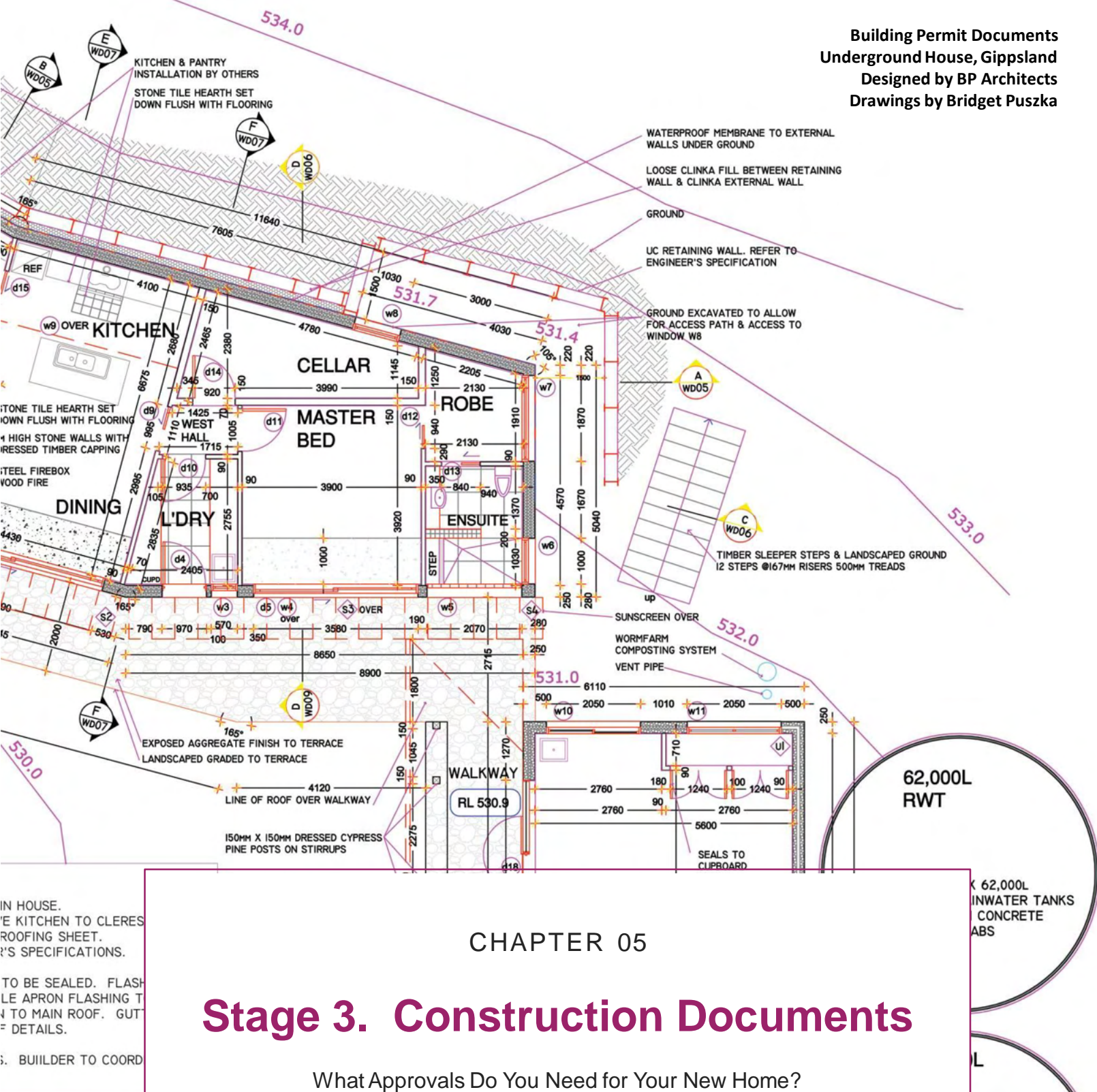
If you know that you do not require a Town Planning Permit, you can skip the next section on Town Planning.

*"So it seems a well-designed and well-built house does indeed provide good thermal performance.*

*Without any further energy input than the sun, wind, and ceiling fans" Colin Gippsland Straw bale Home*







## CHAPTER 05

# Stage 3. Construction Documents

What Approvals Do You Need for Your New Home?



## Stage 3. Construction Documents

### Do You Need a Town Planning Permit?

If you don't know if you need a Town Planning Permit for your new home, you can contact the town planners at your Council. They will tell you if you need Town Planning approval before you can get your Building Permit.

If you plan to build more than one house on your home site, you will need a Town Planning Permit.

### What are Overlays?

An Overlay is a condition that is placed on your Title by the government. There are eighteen overlays listed in the Victorian Planning Provisions.

You can read about these overlays on the Victorian Government's Planning website at

If your Title has a Special Buildings Overlay, you need a town planning permit to build your new home.

A Special Buildings Overlay means that your land is prone to flooding. This Overlay sets the floor level of your home at the 100-year flood level to reduce the risk of flooding.

Other Overlays include heritage significance, environmental significance, vegetation protection, design and development, neighbourhood character and parking overlays.

You can find out if your Title has Overlays on the Victorian Government's planning website at

### What is Town Planning?

Town planning is part of urban or city planning.

If you require a Town Planning Permit, your Council is the authority that issues planning approval.

The town planners at your local Council review your Town Planning drawings and report, and they have the authority to approve or not approve your application.

Without town planning approval, you cannot proceed to the next step of obtaining a building permit.

### How do Town Planners Decide if you should have Town Planning Approval?

There are town planning rules and guidelines that the town planner follow.

If your Title has Overlays, then the town planner will check if your plans meet the Overlay requirements.

For example, your home site may have a Special Buildings Overlay on part or all of your home site.

The Town Planner will check that your floor levels against the 100-year flood level for your area.

## Stage 3. Construction Documents

Town Planners are subjective in their view of your home development.

For example, they can decide if the benefits of sustainability of your home design outweigh other Town Planning requirements.

The Town Planner can also impose conditions on your home plans that you have to meet to get your Town Planning Approval

### How Long Does it Take to Get Town Planning Approval?

The approval process for Town Planning can take six months or longer.

If you have Town Planning Approval and the design of your home changes at a later stage, you have to reapply for approval for the changes.

To reapply for approval for the changes to your home project, you give your updated Town Planning documents, with a fee, to the Town Planning Department for approval.

This resubmission is called Secondary Consent and covers minor modifications to your already approved Town Planning Permit.

You can read about Secondary Consent at the Glen Eira Council website.

### What do You Need for a Town Planning Application?

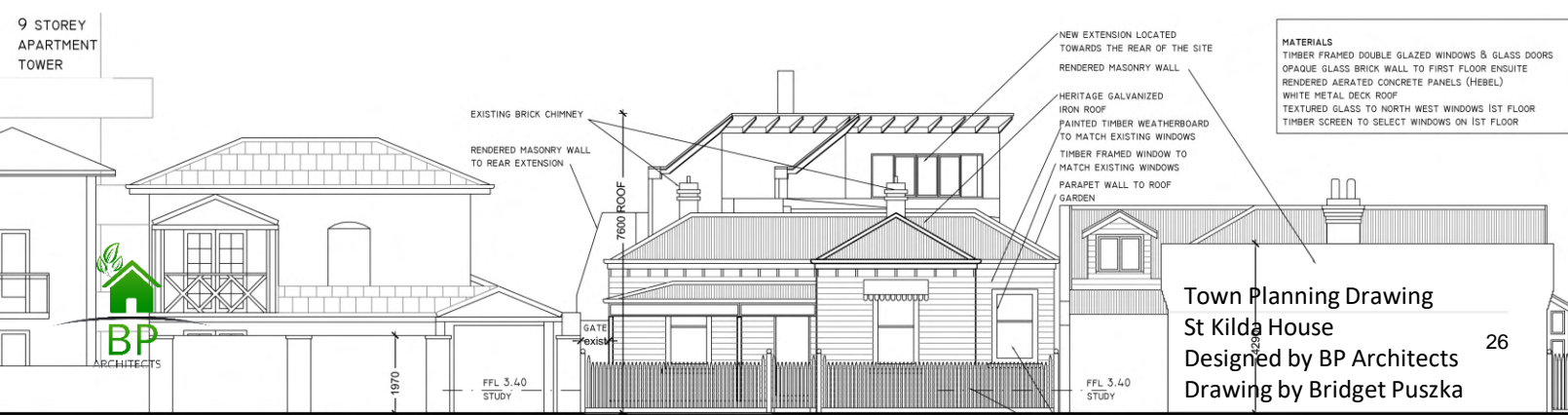
Town Planning approval requires submitting a set of Town Planning documents and reports, with the fees, to the Town Planning department at your local Council.

These documents show the Town Planner the design of your new home and how it fits into your street and impacts your neighbours.

Town Planning documents are different to building permit documents.

The documents show how your new home meets the town planning requirements of

- setbacks
- overlooking
- overshadowing
- your neighbour's private open space
- neighbourhood character and other aspects



## Stage 3. Construction Documents

### Building Permits

You need a Building Permit to build your home.

Building inspectors are the authority who issue Building Permits, and they either work for a local Council or privately.

You, your architect or builder, can submit the documents to the building inspector to obtain your building permit.

Construction documents include the plans and drawings that the builder needs to build your home.

Specifications and schedules detail what the builder has to include in your new home. These documents form part of the contract between you and your builder.

So in effect, your drawings, specifications and schedules are part of the contract between you and your builder.

What is on the drawings, schedules, and specifications is what the builder agrees to build for the fee you agreed to pay in the contract.

How much information included in your construction documents is crucial as it makes the difference in managing construction costs and the builder's extras that can blow out a budget.

If an item or builder's work is not in the documents and you want it included in your new home, then it will become what is known as an extra.

When the builder charges for extras, that is when the construction budget can escalate.

To manage my client's construction budget, the contract documents I produce are thorough and detailed.

Detailed documents help to manage construction costs and reduce the stress of budget blowouts.

Including most of the building work and specified items in the documents will minimize the number of builder's extras.

*“When approaching builders with the plans and specs provided by Bridget, the builders were impressed with the quality and level of detail in the plans Bridget provided”*

Brian and Julie, Cheltenham Home

All the same, you can expect the builder to put a claim in for extras. Some items are not known until the builder starts work on your home project.

For example, if you have underground rock on your home site, the builder only finds out when digging the foundations. The builder will put a claim for the extra expense of drilling through rock.

When the builder puts claims in for these unknown expenses, this is when you can use your contingency sum.

The money you put aside in your contingency sum covers the cost of these extra unknown expenses.



## CHAPTER 06

# Stage 4. Tendering and Builder Selection

What Is Tendering and How to Choose Your builder



# Stage 4. Tendering and Builder Selection

## What is Tendering?

When your architect has finalized your construction documents, the next stage is stage 4 Tendering and your builder selection.

Tendering is when a select group of builders price to build your home. It is a competitive process to find out the 'Market price' for constructing your house.

By tendering your home project, you know the amount submitted to build your home is what Market charges.

Each builder will price the cost for this work differently. Therefore, to find out the competitive Market price for building your home, the tender documents are sent to several builders.

## What are the Tender Documents?

The tender documents are the construction documents, including the architectural and engineering drawings, schedules, specifications and a tender letter with instructions for the builders.

Some builders will not provide a quote for the work, so that you may end up with fewer tenders returned.

## Choosing Your Builder

Sending the tender documents to a shortlist of three to five builders should mean that you have sufficient tenders from builders to make a comparative decision on the best builder to build your home.

It is essential to consider other factors in the choice of your builder before you select the builder at the lowest price.

Sometimes builders price low to get the job and then issue extra after extra during construction, often exceeding other tender prices.

You want a quality builder with who you can openly communicate.

There will be issues that come up on-site, and you will need to resolve these issues with the builder to a satisfactory outcome.

## Stage 4. Tendering and Builder Selection

### What Affects the Tender Price?

When you receive the tenders back from the builders, you find out how much it will cost to build your home.

You may have already received an opinion of probable cost from your architect.

You may have a construction estimate from a Quantity Surveyor or Building Estimator.

These prices may be six months old before you are ready to start building.

So, sometimes the tenders are higher or lower than the cost estimates.

One thing that affects the price of construction is the price of steel in the Market.

If the builder is busy with jobs lined up, they will not price competitively to build your home.

If access is difficult to your home site, the builder will allow for this in his quotes.

Observing health and safety matters may result in additional costs to meet compliance requirements.

The builder may not be familiar with some construction methods or materials used on your home.

Because building your home may be new to the builder, they may charge additional costs.

Builders may have different profit and margins costs in their tenders.

### What to do if the Tender Price is Higher than Your Budget?

All these factors can result in you receiving tenders of varying prices, which may exceed your initial construction estimate.

It is far better if the tenders fall within your budget.

But, if the builder's tenders are higher than your budget, it does not mean you cannot proceed.

It is a matter if you can negotiate the scope of works for the builder to reduce the costs.

You want to negotiate the work and the final contract price without compromising the design of your home.

After all, you want to be happy in your new home.

To achieve this outcome, discussions with the builder would include the scope of works, building materials, construction methods and other opportunities to reduce costs.

## CHAPTER 07

# Stage 5. Contract Administration

When Building Begins

## Stage 5. Contract Administration

Contract administration is the stage that takes place after you have signed a contract with your builder.

That's when your architect can go on-site, as your representative, to inspect the builder's work and make sure everything is according to the documents.

During construction, many issues can occur.

For example, when building a new home in Essendon, the builder asked me about the beam that would run horizontally through the kitchen.

The roof beam that the builder was talking about was not horizontal. It showed on the architectural and engineering drawings as a cranked beam. The intention was for the kitchen to have a raked cathedral ceiling.

I explained this to the builder and asked him to recheck the architectural drawings and engineering drawings and build the right design.

On another project in Ivanhoe, my clients contacted me and said something was not right with their bathroom fit-out.

When I checked the builder's work, she built a completely different bathroom to the architectural drawings.

We then had to work out a solution on-site that would be acceptable for my clients.

After a home in Northcote was completed, I contacted my clients to see how their new home suited them. They told me that their new living room was still cold.

A house designed to be energy-efficient should not be cold, so this was a significant concern.

When I went over to find out why their living room was cold, they told me that the builder had convinced them that they didn't need double glazing in Melbourne.

Heavy drapes and pelmets provide good insulation for windows, so instead of the light curtains, my clients had to consider changing the window coverings for their Northcote home.

These are some real examples of what can happen on a building site.

There are many examples of unexpected things that can occur when building a house.

Expert advice can get you through these difficult situations.



Kitchen  
Essendon House  
Designed by BP Architects  
Image by Bridget Puszka



## CHAPTER 08

# Case Study Architectural Design Process

Mark and Dorothy's Beautiful Colourful Sustainable Home

# A Case Study in the Architectural Design Process

## Mark and Dorothy's Beautiful Colourful and Sustainable Home

Dorothy and Mark loved the colours orange and blue, and they wanted a sustainable home.

They had a house site in Essendon which they subdivided with Mark's sister and her partner.

Mark's sister lived in the front house with her partner, and Dorothy and Mark chose the back part of the property to build their new home.

Mark is a computer geek and has muscular dystrophy. He relied on an electric wheelchair to get around.

## What was important to Mark and Dorothy in their New home

Mark's friends also used electric wheelchairs, and he visioned his home as a hub where he and his friends could gather around his kitchen table and play computer games.

Both Dorothy and Mark were passionate about the environment, and they saw their new home in Essendon as an opportunity to make their new home as sustainable as possible.

They did their homework and asked me to be their architect and to design their new home.

## First Meeting – Home Brief

We first met at their apartment and discussed their plans for their new home. And what was important to them in their future new home.

Once I understood their Wish List, I could put together their new home Brief. We arranged a time to meet on-site.

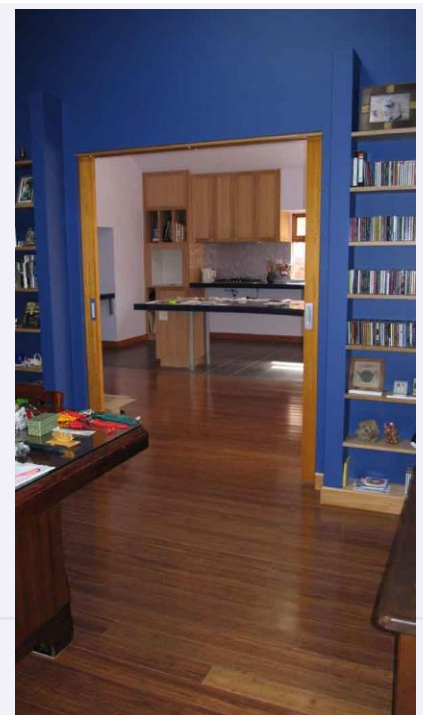
## Second Meeting – Site Visit

I could see how the surrounding buildings and other aspects would impact Mark and Dorothy's new home at their home site.

From this information, I could plan for the physical surroundings of the home site and optimize their Concept Plan.

Mark and Dorothy provided me with a copy of their Title to identify any restrictions on their home site.

Also, I researched the climatic data for their new home site.



View to Kitchen  
Essendon House  
Designed by BP Architects  
Image by Bridget Puszka

# A Case Study in the Architectural Design Process

## Concept Plan

With this information at hand, I could produce a Concept Plan for Mark and Dorothy. They discussed their new Home Concept Plan and showed it to their family and friends for their opinions.

Mark and Dorothy both loved how the ideas had come together in their Concept Plan, and we could proceed to the next design step of producing their sketch design drawings.

## Sketch Design

Along with the sketch design elevations and floor plan, I produced a floor area schedule so that Mark and Dorothy could check that the room sizes suited their needs.

The design of their new home plan accommodated wheelchair access throughout and around their future home.

## Opinion of Probable Cost

From the floor area of their sketch design plan, I could provide Mark and Dorothy with an opinion of probable cost.

An opinion of probable cost is not a cost estimate but indicates how much it may cost to build their new home.

If a more accurate cost estimate was required, Mark and Dorothy could have a quantity surveyor provide the costing. They were happy to proceed to the Town Planning step.

## Town Planning

We met with a Town Planner from their Council before proceeding with their Town Planning documents. This preliminary meeting allowed us to discuss Mark and Dorothy's new home plans to see if the Town Planner had any objections.

The Town Planner had no immediate objections to the sketch design drawings for Mark and Dorothy's new home.

If the town planner objected to Mark and Dorothy's house design, you could do one of two things.

Firstly, you could change the house design before preparing the Town Planning documents for submission to the Council.

Or, if you didn't want to make any changes, you could leave the drawings the way you want your home built. However, knowing that your Town Planning drawings do not comply with Town Planning requirements, you may need to challenge the Town Planner if they do not approve your home project in the Victorian Civil and Administrative Tribunal (VCAT).





# A Case Study in the Architectural Design Process

With no objections from the town planner, I proceeded with Mark and Dorothy's Town Planning documents and submitted them to the Council for assessment.

Town Planning took six months before the Council approved the design. In Mark and Dorothy's town planning approval, there were conditions.

To proceed, we had to meet these conditions of the town planning permit. The conditions on the Planning permit included installing a stormwater pit on-site and making sure that there was sufficient site permeability.

While the Town Planning application was with the Town Planners at the Council, work started on the construction documents.

## Secondary Consent

Mark and Dorothy then wanted to make some changes to their home design.

After their town planning permit was approved, I submitted a secondary consent form to Council to obtain planning approval for these changes to their home design.

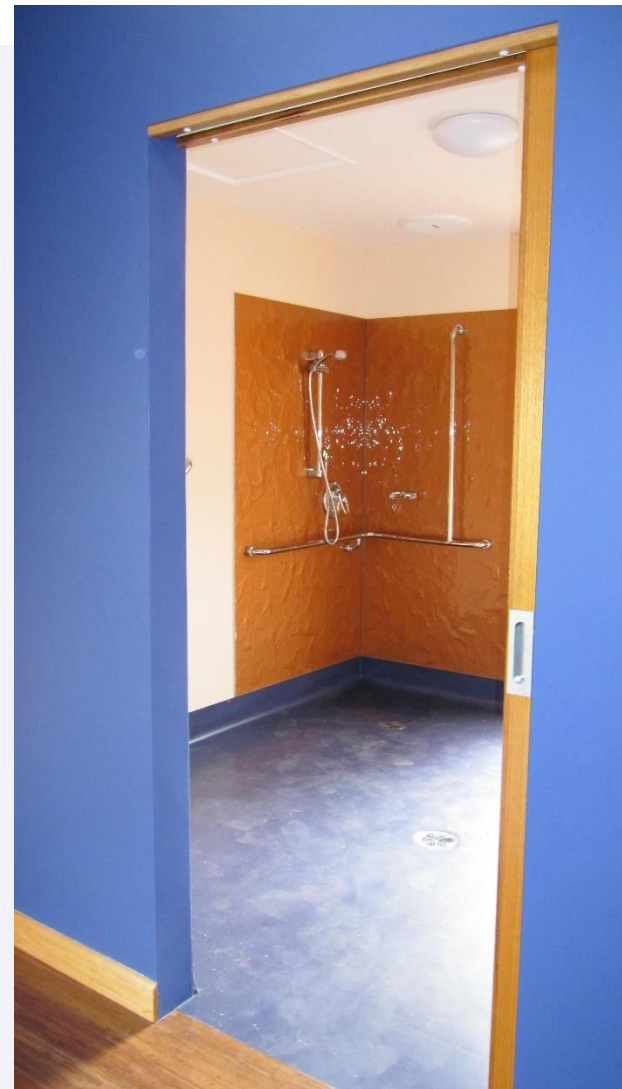
Obtaining the secondary consent approval took about one month.

## Building Permit Documents

Construction documents include schedules for windows and doors and fixtures and finishes schedules.

Construction drawings are to scale with dimensions show details and specifications, so the builder knows what they have to build.

There are many items to select and specify on the construction documents.



Accessible Shower  
Essendon House  
Designed by BP Architects  
Image by Bridget Puszka



# A Case Study in the Architectural Design Process

## Building Permit Approval

A private Building surveyor received the construction documents to process for a building permit.

## Tendering

We made a shortlist of local builders who had good references and experience in quality home construction.

Mark and Dorothy were ready to select their builders to quote on building their new home.

Five builders received the tender documents, and a month was allowed for quoting.

We received tenders back from three builders, and from these tenders, we could select a suitable builder for their new home project.

## Contract Administration

Mark and Dorothy asked me to act as their agent on-site during the construction of their home in the contract administration stage.

At my first meeting with the builder on-site, the builder said he couldn't build the house. He believed that he could not construct the box gutter on the boundary.

Had I not worked with the engineer at the truss manufacturer to design the trusses for the box gutter when preparing the construction documents, I would have trouble helping the builder.

Instead, I asked the builder to contact the truss manufacture and work on Mark and Dorothy's home proceeded.



Chain downpipe and stone basin  
Essendon House  
Designed by BP Architects  
Image by Bridget Puszka

# A Case Study in the Architectural Design Process

Mark wanted to sit with his friends around the kitchen bench in their wheelchairs. So I designed the kitchen bench as a cantilevered bench.

Because the kitchen bench was a unique design, I worked with the stone manufacturers to detail a countertop they could build.

When the builder was working on the kitchen, he told me he could not build the kitchen bench.

Again I could direct him to the bench manufacture, and work proceeded with building the kitchen benchtop.

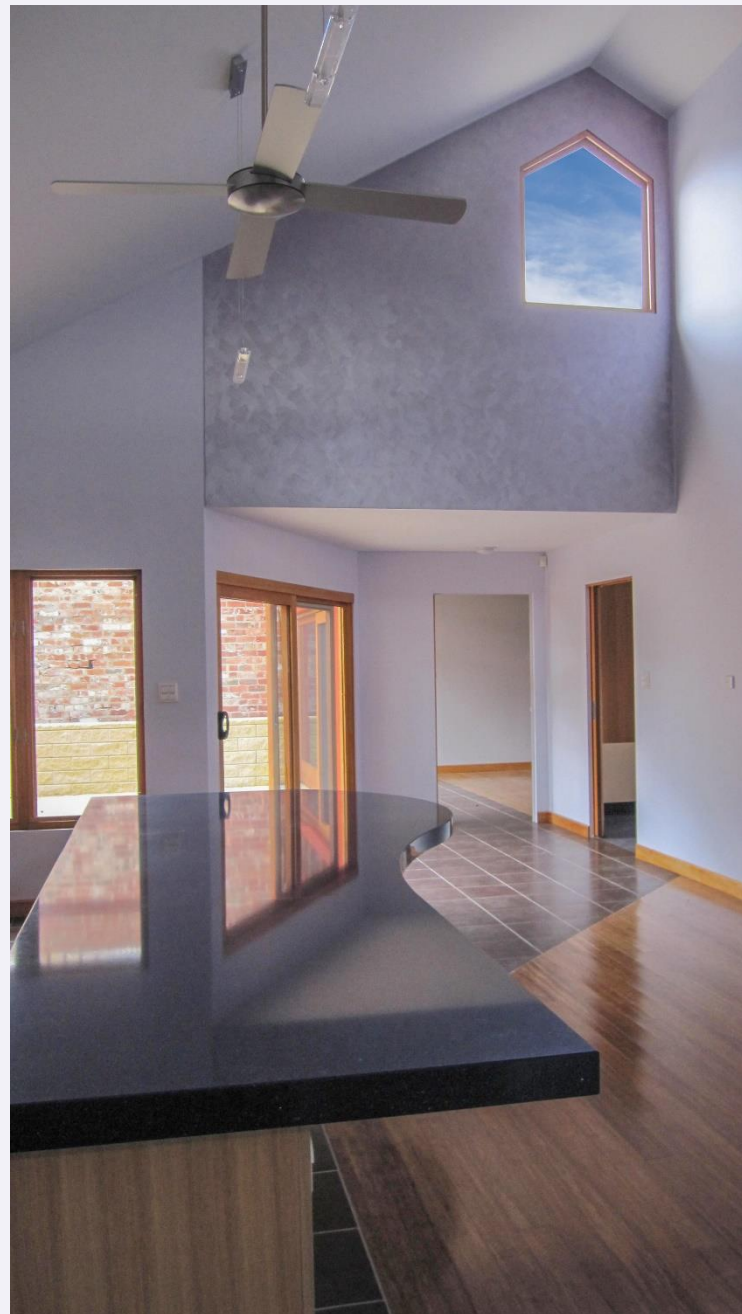
At one stage, the builder got busy on several houses at once, and I did not see any trades working on Mark and Dorothy's home for weeks.

Because the builder was not working on their home, there was a delay-after-delay in work deadlines. It took persistence to get the builder was back on-site working.

In the end, the builder ran over the agreed date for the completion of Mark and Dorothy's home.

On Mark and Dorothy's behalf, I could successfully negotiate to have the builder pay them liquidated damages.

Liquidated damages are an agreed sum of money written into the Contract that the builder agreed to pay Mark and Dorothy to cover their costs if the builder did not meet the agreed completion date.



Kitchen benchtop  
Essendon House  
Designed by BP Architects  
Image by Bridget Puszka

# A Case Study in the Architectural Design Process

## Mark and Dorothy's Beautiful Sustainable Home

Mark and Dorothy's home is a beautiful home that requires very little heating in winter.

Dorothy said she

*“only on the coldest days she runs the oil fin heater at half heat to warm their home.”*

They love living in their home, and it provides them with a sense of freedom to have a home designed to suit them and their needs.

They have a blue quartz stone kitchen benchtop that is cantilevered to allow free use of wheelchairs.

And their bathroom vanity is a curved orange quartz stone vanity with a glass block wall providing diffuse skylight.

The north-facing window wall of their bedroom provides a warm, comfortable room.

Dorothy and Mark love their colourful, unique home designed to suit their needs and lets them live their optimal sustainable lifestyle.

So you can see from Mark and Dorothy's experience that the architectural design process takes time.

Time is needed to review the drawings and decide if you are happy with how your new home is taking shape.

## Important Points

Many decisions are necessary when you custom design a new home.

Informed choices about the best products, materials and design for your new home means you get the best quality.

You can specify the type of materials, windows, tapware, door handles, lights, and other items in your new home to suit your taste.

If you require town planning approval, add an extra six months to the architectural design process.

Working with an architect who understands your vision and the look and feel of your new home adds value.

You want the right team for your new home that you can talk to and who will listen.

That means selecting the right architect and an excellent builder to get a valuable home that suits you and your family.



Airlock Entry  
Essendon House  
Designed by BP Architects  
Image by Bridget Puszka





## CHAPTER 10

# How Do You Choose the Right Architect?

Essential Considerations in Choosing Your Architect and  
How Do Architect's Charge Their Fees?



# How Do You Choose the Right Architect?

It's essential to choose the right architect for your new home.

As one client told me, you would get an entirely different house design from another architect.

So how do you decide if the architect is the right architect to design your new home and meet your expectations?

## Best Residential Design

One common aspect is that your architect should share the same values as you do in your new home.

You want the best house design to match your dreams and aspirations for your new home.

Often my clients want a sustainable home that is easy to clean, low maintenance, lots of natural light and cooling breezes, low energy bills and looks beautiful.

Importantly, you want to feel that your architect listens and understands your dreams and thoughts for your new home.

In Bev's case, she suffered from multiple chemical sensitivities and needed a home that would not make her sick. You can read why Bev chose me to design her new home in Warragul in her testimonial.

*"I have not suffered any allergic reaction since moving into my newly completed home,"* Bev, allergy sufferer

## The difference in an Architecturally Designed Home

Each architecturally designed home is unique and is the only one of its kind. Unique in how your new home is designed to your specifications and custom-built to optimize your home life.

An architecturally designed home is not the same as a home designed and built by a builder. Or a house designed by a draftsman and built by a builder\*.

It is not a ready-made house like a project house. display home or a kit home.

The characteristics of an architecturally designed home make for a healthy living environment comfortable during winter and summer, despite weather extremes.

Your ongoing house maintenance and household costs are lower, providing more financial security in your future.

My clients are just like you and me. They want their new home to be better than their last home. And they know they need someone with knowledge to help them get the home they have always dreamed about.

Want to know what people say about their architecturally designed homes?

You can find out how my clients feel about their new architect-designed homes on BP Architects' Client Testimonials page.

*\*To find out the difference between an architect and a house designer, you can read more on How You Can Choose the Best Home Design Expert for Your Beautiful New Home.*

# How Do You Choose the Right Architect?

## How Architects Charge their Fees

Architects charge their fees as an hourly fee, as a lump sum fee or as a percentage of the cost of construction fee.

Generally, architects charge ten to fifteen per cent of the cost of construction for full architectural services.

The size of the project and the complexity of the design also affect architect fees.

Some architects will only provide their services if they can provide full architectural services, including all five architectural design processes.

Providing all stages of the architectural design process is called full architectural services

Other architects provide partial architectural services and provide one or more stages of the architectural design process.

Architectural fees add to the construction budget, so you want to choose an architect where you get value.

Although architectural fees can initially seem expensive, architectural services make a difference in the quality of your future home and resale value.

## How BP Architects Charge Fees

As an architect, I work closely with my clients.

BP Architects charge an hourly fee for the initial design work, stage one and two of the architectural design process.

And for the construction documents, we charge a lump sum fee.

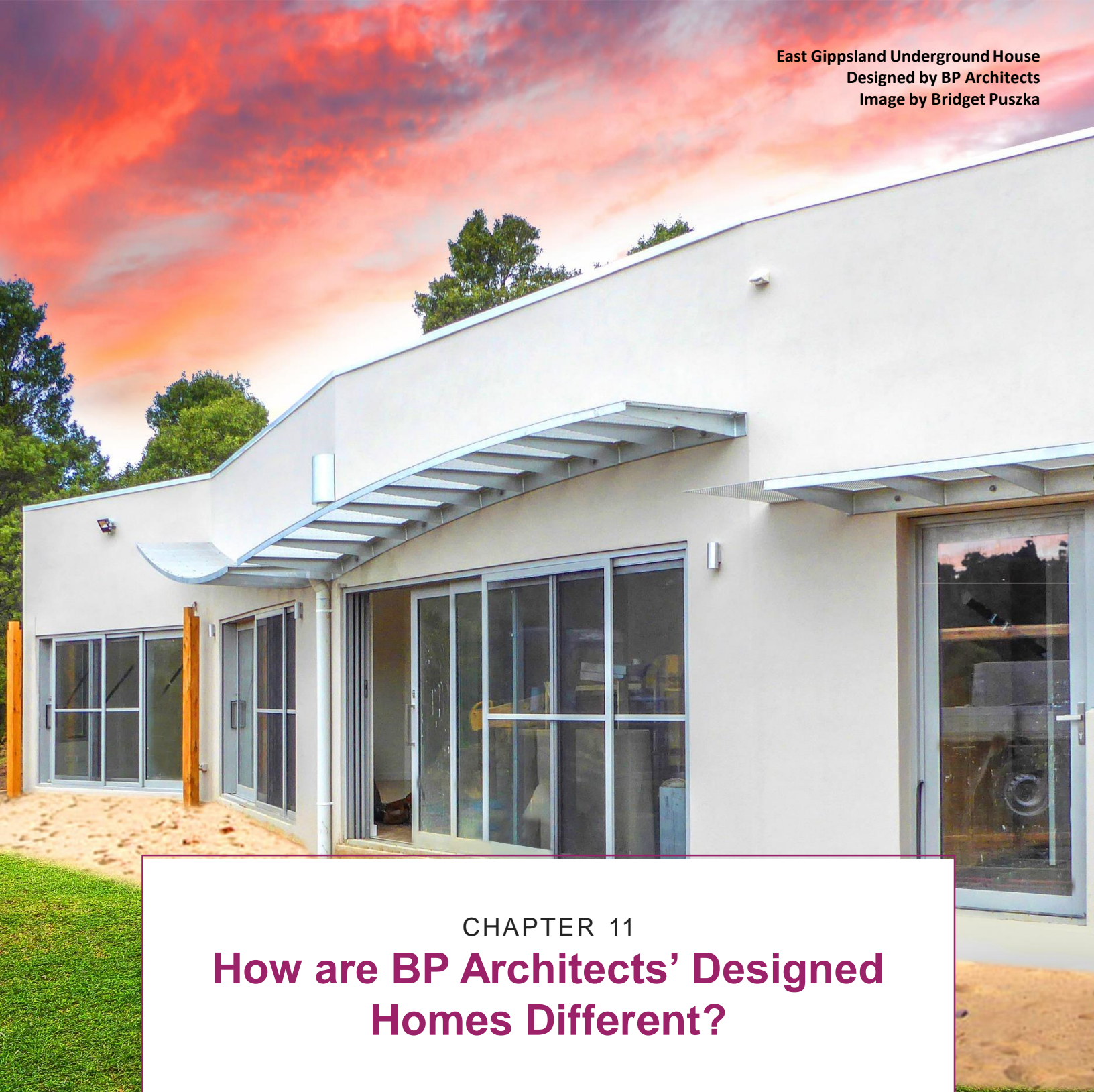
We charge an hourly fee if our clients want us to help them with stage four and five, the tender, negotiation and builder selection and contract administration,

So depending on our client's needs, we provide full architectural services or partial architectural services.

It's challenging to provide a fixed quote for the work required for any one house project as there are different considerations and design parameters for each project.

Each home design project is unique.

Contact us today to find out the best way to help you move forward with your new home project.



CHAPTER 11

## How are BP Architects' Designed Homes Different?

Unique Healthy Green Homes

# How are BP Architects' Designed Homes Different?

## Unique and Innovative Homes

My clients have individual dreams and needs for their new homes. They may have aspirations for a cottage, a holiday shack, a family home, a comfortable home to retire.

No matter whether you need an underground house, a straw bale house, a Hebel home, a house built in the flame zone for bushfire safety, a home in the inner-city with town planning restrictions or if you want a sustainable home in the suburbs.

Each home project is unique. For example, you may want an industrial look and feel for your new home or a home built with natural materials.

Innovation means finding the best design solutions for your new home.

We work closely with our clients, and in the architectural design process, our client's provide feedback.

Our client's feedback on their home design ensures that your home design is right for you.

## Healthy Homes

You may suffer from multiple chemical sensitivity, allergies or you may want a home that has good indoor air free from nasty chemicals.

Certain building materials will out-gas chemicals.

Some of these chemicals are known to cause side effects in humans.

And in some cases, the chemicals are known as human carcinogens.

In our home projects, we specify building materials that do not out-gas harmful chemicals.

## Green Home Design

Do you want a wonderful home that's exceptionally comfortable in all seasons and economical to run?

Do you want a well-designed and well-built house that provides good thermal performance without any further energy input than the sun, wind and ceiling fans?

To achieve these outcomes, we design sustainability and energy building efficiency from the concept through to the building of your new house project.

Your home design balances your needs and wants, site conditions, construction budget, practicality and buildability.

For example, should you have insulation under your house slab? Will this cost more than the value it brings to the energy efficiency of your home? Can it compromise the structural stability of your house? Is it practical for the builder to build it into your house footings?

What you want are the best solutions for sustainability in your home design.

Sustainability and energy building efficiency makes sense and works.

Sustainable design is a logical approach to designing within the set parameters of your locality's sun path and climate.

These parameters cannot change, so you may as well take advantage of them.



# How are BP Architects' Designed Homes Different?

## The Science of Sustainable House Design

There is a science behind designing a comfortable house.

The science of thermodynamics in the design of your green home considers heat transfer and density.

Wind movement science influences the design of your home, in the floor layout, house shape and form and material selection.

Materials science on thermal mass and conductivity of materials help with building materials selection.

Knowing how much insulation is enough means that you don't pay for ineffective excess.

There is the science of bushfire behaviour that means that the design of your home is to the safety guidelines based on this science.

Applying technical aspects of building science to your future home design is you have a comfortable home that is not overly hot in summer and is warm in winter.

Design is not "an architect's whim or fancy", as Colin expressed explaining his experience when I designed his Cheltenham home.

Instead, the architectural design provides excellent solutions to issues that need resolving. For example, there is a science behind the house designed to respond to the climate. It doesn't happen by chance.

## Designed for Your Future Self

Designing for livability is one aspect of house design in the homes I design.

A livable house not only means you have a great home to live in and provide a wonderful home life.

It also means that the houses can accommodate you if an accident occurs or health issues arise.

Or if your elderly parents want to visit.

Or if you have a friend or family member who needs to use a wheelchair.

If you are unfortunate to have an accident where you need easy access to your home, you can still live in your house without significantly modifying your home.

Liveability means that the design of your bathrooms and other rooms in your home consider access.

Hallways and living areas can easily accommodate a wheelchair.

Designing for liveability provides a sense of spaciousness in your home.

Planning a home for your future self may add a small cost to your construction budget.

But this cost is insignificant compared to the cost of demolishing and modifying your home, say if you needed a wheelchair.



## Conclusion

The Best Architectural Team for Your New Home

# Conclusion

You've decided that now is the time to build your dream home.

You've lived in lots of different houses, houses that leak. Homes that don't have enough storage. Cold houses. Overly hot houses. Houses with cracks.

Homes that you spend all weekend tidying, cleaning and sorting to start all over again.

There has got to be a better way to live.

So building a new home makes a whole lot of sense right now.

Then, how can an architect help you improve your lifestyle and provide a safe and happy home?

Finding the right architect for that house you dream about can make all the difference.

An architect can help answer to some of your questions, relieve your stress, create a happy home for you and make your life a whole lot easier.

A uniquely beautiful with low energy usage and easy to clean home can make home life a lot easier.

A house that is free from nasty chemicals that can significantly impact your life provides a healthier living space.

It can open the door to let you live your optimum self and fully transform how you feel about living a happy & healthy life.

## **The Best Architectural Team for Your New Home**

No matter what you want your future home to be like, it is vital to have the right team to help you achieve it.

You cannot have a great home if you have the best design and poor building quality.

Likewise, if you have a great builder and a poor house design, you will not end up with a great home.

You want a great architect who understands your needs and wants in your new home and a good builder who builds quality homes.

This way, you'll end up with a beautiful and comfortable, energy-efficient sustainable home for your healthy home life.

# NEW HOME MASTERPLAN

## YOUR DREAMS

YOUR  
WISHLIST



YOUR  
BUDGET



COUNCIL  
REQUIREMENTS

## YOUR REALITY

TITLE  
RESTRICTIONS



ENVIRONMENTALLY  
FRIENDLY



AESTHETICS  
& STYLE



BUILDING  
REGULATIONS



HEALTH &  
SAFETY



TOWN  
PLANNING



PRACTICALITY



LIVABILITY &  
YOUR FUTURE



INNOVATION &  
RESOURCEFULNESS



YOUR NEW HOME MASTERPLAN





# Resources

<b>BP Architects</b>	<a href="http://www.bparchitects.com.au">www.bparchitects.com.au</a>
<b>Contact Details</b>	<a href="https://www.bparchitects.com.au/contact-details/">https://www.bparchitects.com.au/contact-details/</a>
<b>Designers Differences</b>	<a href="https://www.bparchitects.com.au/architect-draftsperson-building-designer/">https://www.bparchitects.com.au/architect-draftsperson-building-designer/</a>
<b>Client Testimonials</b>	<a href="https://www.bparchitects.com.au/testimonials/">https://www.bparchitects.com.au/testimonials/</a>
<b>Sustainable Home</b>	<a href="https://www.bparchitects.com.au/portfolio/sustainable-ecohome/">https://www.bparchitects.com.au/portfolio/sustainable-ecohome/</a>
<b>Allergy-Free Home</b>	<a href="https://www.bparchitects.com.au/portfolio/allergy_free_warragul_home/">https://www.bparchitects.com.au/portfolio/allergy_free_warragul_home/</a>
<b>Strawbale Home</b>	<a href="https://www.bparchitects.com.au/portfolio/zero-energy_strawbale_home/">https://www.bparchitects.com.au/portfolio/zero-energy_strawbale_home/</a>
<b>Sun Path</b>	<a href="https://youtu.be/uzhvaPnTlzk">https://youtu.be/uzhvaPnTlzk</a>
<b>Building Permits</b>	<a href="https://www.vba.vic.gov.au/consumers/home-renovation-essentials/permits">https://www.vba.vic.gov.au/consumers/home-renovation-essentials/permits</a>
<b>Bushfire Behaviour</b>	<a href="https://www.science.org.au/curious/bushfires">https://www.science.org.au/curious/bushfires</a>
<b>Construction Process</b>	<a href="https://www.yourhome.gov.au/you-begin/construction-process">https://www.yourhome.gov.au/you-begin/construction-process</a>
<b>Town Planning</b>	
<b>Overlays</b>	<a href="https://vicsmartguide.com.au/vicsmart-planning-permit/application-forms-checklists/overlays-and-vicsmart-applications">https://vicsmartguide.com.au/vicsmart-planning-permit/application-forms-checklists/overlays-and-vicsmart-applications</a>
<b>Local Planning</b>	<a href="https://www.planning.vic.gov.au/guide-home/local-planning-information">https://www.planning.vic.gov.au/guide-home/local-planning-information</a>
<b>Planning permit process</b>	<a href="https://www.planning.vic.gov.au/permits-and-applications/do-i-need-a-permit">https://www.planning.vic.gov.au/permits-and-applications/do-i-need-a-permit</a>
<b>Secondary consent</b>	<a href="https://www.portphillip.vic.gov.au/media/migaqlop/secondary-consent.pdf">https://www.portphillip.vic.gov.au/media/migaqlop/secondary-consent.pdf</a> <a href="https://www.gleneira.vic.gov.au/services/planning-and-building/planning/applying-for-a-planning-permit/existing-applications/secondary-consent">https://www.gleneira.vic.gov.au/services/planning-and-building/planning/applying-for-a-planning-permit/existing-applications/secondary-consent</a>

# Who Should Read this eBook?

*This eBook is for people interested in healthy and sustainable living.*

*Who wants a new home custom designed to their needs and taste.*

*Our architectural and design services offer healthy living and sustainable design, unlike other architects.*

*Our offer provides unique and cost-effective design solutions combining aesthetics with functional, sustainable home design.*

**Book a free 45-Minute telephone consultation now**

**and make a start on your beautiful future home today.**



**BOOK YOUR FREE CALL  
NOW**

Email: [info@bparchitects.com.au](mailto:info@bparchitects.com.au)

Website: [www.bparchitects.com.au](http://www.bparchitects.com.au)



Kitchen, St Kilda House  
Designed by BP Architects  
Image by Bridget Puszka