



Valley Junction, Circa 1908

A Pattern Book

— for West Des Moines Neighborhoods —

Resources and ideas for renovating and updating your home



Introduction

A photograph of a residential neighborhood. In the foreground, there is a large, dark sign with the letters 'WV' in a stylized font. Below it, a smaller sign reads 'THE CITY OF West Des Moines'. The background shows a brick wall, a fence, and trees with autumn foliage. A house is visible in the distance.

The City of West Des Moines is interested in preserving its existing older neighborhoods by encouraging homeowners to retain the integrity and character of their homes. With that in mind, they have asked for help from the design community in identifying the prevalent architectural styles and logical ways to renovate and update these older homes to better reflect how people live today. Use of this Pattern Book will help maintain healthy and diverse neighborhoods comprised of a range of choices in housing style, size and affordability within the City.

How To Use This Book

“We like where we live and we don’t want to move –
but we wish we could change a few things about our house...”

-West Des Moines homeowner

For everyone who has had thoughts like these, this book is for you. This Pattern Book was created specifically to help local homeowners who are thinking about updating or renovating their homes. The intent of this book is to provide a useful, easy-to-follow resource on the basics of updating or renovating a home using good design practices. If you’re considering a change to your house, the ideas and resources in this Pattern Book can help you reach your goal.

Before writing the Pattern Book, architects and city planners visited several West Des Moines neighborhoods and gathered ideas on what actual homeowners said they most wanted or needed. Those ideas went to designers at BSB Design, located in West Des Moines, who then produced the suggestions found within this book.

The Pattern Book takes you through many facets of the design process, including going from “just thinking” about adding on or remodeling, through the research and preparation stages, to the visualization of dreams and goals for your specific project. Throughout the book are suggested exercises that will give you a head start. To get the most from this process, dedicate a notebook or 3-ring binder for notes and images. Before you know it, you will have much of the information you need for your project all organized and ready to go!

The book begins with an *Introduction* that includes a *Table of Contents*, a *City History* and some *Questions To Ask Before You Start*. The *City History* of the area is framed within the story of suburban America. This history will help you understand the various forces that played a part in the growth of West Des Moines and its neighborhoods.

Some *Questions To Ask Before You Start* are included to aid in thinking of the many elements – from financing to design questions to building permits – that need to be considered before renovating or remodeling.

Design Do’s and Don’ts is a primer on the basics of good

versus bad design. Subsections addressing proportion, style and context, details, handicapped accessibility, landscaping and curb appeal, parking solutions, porches and “green” building along with a style guide present some basic design “rules of thumb” that guide design professionals. These subsections provide an opportunity to begin developing design considerations applicable to your own home.

The *Renovation Suggestions* section uses three example houses – a Cape Cod, a Ranch and a Split-level – to illustrate ways you might update your own home. Keep in mind, these renovations aren’t necessarily limited to the housing styles shown. The ideas behind them can be applied to multiple housing styles, even ones not discussed in this book. For instance, even if your house isn’t a Cape Cod you can still adapt the idea of adding a family room to your Ranch. Careful use of the suggestions presented here will allow you to sensitively adapt the same ideas to fit your home.

The *Appendix* wraps up the book and includes a *Drawing Board*, a list of *Other Resources*, *Sponsors* and *Acknowledgements*. The *Drawing Board* is where you get to have some fun. Here you can begin to sketch out plans and elevations of your ideas using the included architect’s scale and example furniture. You may want to photocopy these pages before drawing on them just so you’ll have room for mistakes and redos. And remember, if your project turns out to be too much for you to handle, there are plenty of experienced architects and builders who can turn your dreams into reality.

It would be impossible to put every good idea on updating or renovating homes into a single book. Therefore, a section called *Other Resources* is included featuring some great books, along with a handy list of organizations, city departments and business contacts that can all be used for help in creating your home addition. Finally, the *Sponsors* and *Acknowledgements* page gives credit to those who made this book a reality. Good luck!

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City History



History of the City

The first permanent settlement in what is now the City of West Des Moines dates from 1846 when James C. Jordan pitched a tent between two burr oak trees in Walnut Township. Later he built a log cabin and house on the same site. This house still stands today at 2001 Fuller Road. Mr. Jordan became one of the most influential people in the founding of Valley Junction, the town that has become the City of West Des Moines.

The 1850s saw the first railroads push into Iowa and the inaugural train arrived in Des Moines in 1866. Others followed, and between 1867 and 1869 in the valley of the Raccoon

River, the Rock Island and Milwaukee lines created a junction for shipping livestock and produce. The town was incorporated in October 1893 under the name Valley Junction, aptly named for the junction of the railways. The community attracted railroads to build their shops in the newly incorporated town and with it, housing to accommodate the growth anticipated from the railroad businesses.

Valley Junction was designated as a railroad terminal division station in 1892, as it was the only such station between Rock Island, IL, and Council Bluffs, IA. The town boomed between 1892 and 1896. In 1894, an election was held which resulted in a new mayor and a full council. Many railroad companies transferred operations to Valley Junction and turned the town into a very important railroad center. By the turn of the century, 26 passenger trains and scores of freight trains passed through town daily.

From the early 1900s to about 1920, coal mining in Polk County became a dominant employment source. Polk County was in the center of the state's largest coal deposits. Many miners lived in Valley Junction and worked in the mines elsewhere in Polk County, especially Des Moines. One large mine was located near the 300 block of Ashworth Road, extending north and west to Clive. This mine alone employed 300 workers. Mining was an important stepping stone in the transformation of Valley Junction from a railroad town to an important commerce and residential center.

A railroad strike between 1922 and 1923 changed Valley Junction forever. During the strike, many men were idle, and those days were considered very dark and desperate. Many of the buildings along 5th Street housed bars, billiard halls and houses of ill repute. The railroads brought in many African American and Hispanic workers to break the strike. This sudden inflow of workers created an immediate need for housing and sparked the first of many periods of explosive growth for the city. When the railroads moved their operations out of Valley Junction in 1936, the residents

were not sorry to see them go and looked forward to changing the image of the town from its historically unruly prominence to one of a quiet suburban community. As early as 1931, the city discussed a possible name change for Valley Junction. Over the next few years, the city held three elections before the residents accepted the new name of West Des Moines on December 7, 1937. With the railroads gone and the new name



7th Street Looking North, Circa 1910

becoming effective on January 1, 1938, West Des Moines was primed for stepping forward.

After World War II, approximately 20 factories were located in West Des Moines, bringing in about 600 jobs. The 1950s and 1960s represented a boom in manufacturing and industry in West Des Moines. Industries which based themselves in West Des Moines included sand, gravel and concrete products manufacturers, aircraft parts, hydraulic pumps and motors, insulation, metal fabrication, steel treating, printing, plastics, cabinets, and tool and die. In addition, the manufacturers and distributors to support these industries also flourished in West Des Moines.

In 1946, the City covered less than two square miles and had a population of 5,400. In 1949, West Des Moines annexed an area north of Ashworth Road and east of Ninth Street. 1950 saw the

annexation of 280 acres and 550 acres in the area known as Clover Hills, which sits north of Grand Avenue. In 1956, the City annexed additional land south to the Raccoon River, west to the Polk-Dallas county lines, and north to University Avenue, increasing population by 600. Between 1950 and 1960, West Des Moines grew by fifteen square miles and the population doubled. Beginning in the early 1950s, large housing tracts were developed. One of the first of these developments was the Fairmeadows area. Touted as a place for families to enjoy suburban living with city conveniences, Fairmeadows started out with 250 homes. This trend continued through the decade with the annexation of more land and the construction of hundreds of homes, on average about 150 homes a year.

In the mid-1960s, I-235 was constructed through the northern part of the City, and it extended west to the junction of I-80 and I-35. The construction of this roadway further enabled the continued growth of the City of West Des Moines to the west. In 1970, the population had quadrupled in 30 years, yet less than half of its land area was developed. During



7th Street Looking North, Circa 2007

the 1980s more apartment units were built in West Des Moines than in any other community in central Iowa. This encompassed nearly one-third of the area's new housing construction.

In the 1990s and 2000s, the city designated hundreds of acres for development. By its location in the metropolitan area, at the junction of Interstates 35,

80, and 235, West Des Moines has been successful in attracting corporate headquarters and regional medical facilities, along with stimulating new construction of office buildings and other commercial entities. More recently, West Des Moines was chosen by one of the largest mall developers in the country to construct a 200-acre, 2 million square foot retail and entertainment center west of I-35 and south of I-80, reinforcing the City's strength in attracting residential and other commercial development and the high quality of life its residents and visitors enjoy.

Questions to Ask Before You Start

Planning

How long do we want or plan to live in our home?

Setting a timeline for how long you plan to stay in your home should be done at the very beginning of the planning process. If you're only going to be in your home for a few years, limit updates to those that will increase the livability while you're there and enhance the curb appeal when you do get ready to sell. Simple things such as a new coat of paint or planting some flowers are economical ways to do this. If you like your neighborhood, the schools and shops, or maybe your job is nearby, you may plan to stay in your home much longer, even indefinitely. If that is the case, a major renovation may be just what your home needs.

In what ways does our home fit our needs well, and in what specific ways does it not meet our needs? What changes would we like to make?

Drawing a floor plan of your house may help you to visualize what needs to be changed. You could also walk through the house and brainstorm together. Record *all* of your impressions.

Is there a space we wish we had that doesn't exist yet? Could it be carved from other spaces in the house, or would we need to add on? Are there any rooms we don't use very often?

You may want to make photocopies of your floor plan and sketch possible alternatives. Take your time and enjoy this process – it is much cheaper to dream on paper than in wood and concrete, and you might find a way to make space without adding on! As a general rule, remodeling and rearranging interior space costs far less than building an entire new addition. Sometimes just a few more square feet can make a big difference. For instance, cantilevering out a bay or a bow window is an economical way to increase square footage without the additional expense of foundation work. Converting a seldom used dining room into a home office is a way to maximize the use of the space you already have. When these less expensive alternatives can't meet your needs, adding on or moving remain as choices.



What could be better about our home aesthetically?

It helps to walk all around your house and discuss its strengths and shortcomings. See the architectural character checklist by the National Park Service in the *Getting the Details Right* section for help on this. Record these observations and save them for later.

Can we make the changes we want and still stay consistent with the style and neighborhood?

Some castles are better left in the clouds! Sensitivity to not only your neighbors but also the historic character of your neighborhood needs to be taken into account when planning any exterior addition or renovation to your home. To keep the peace, consider limiting extremes in personal taste to an interior renovation that won't be seen by everyone who passes by your house.

What structural or other technical challenges do we need to be aware of?

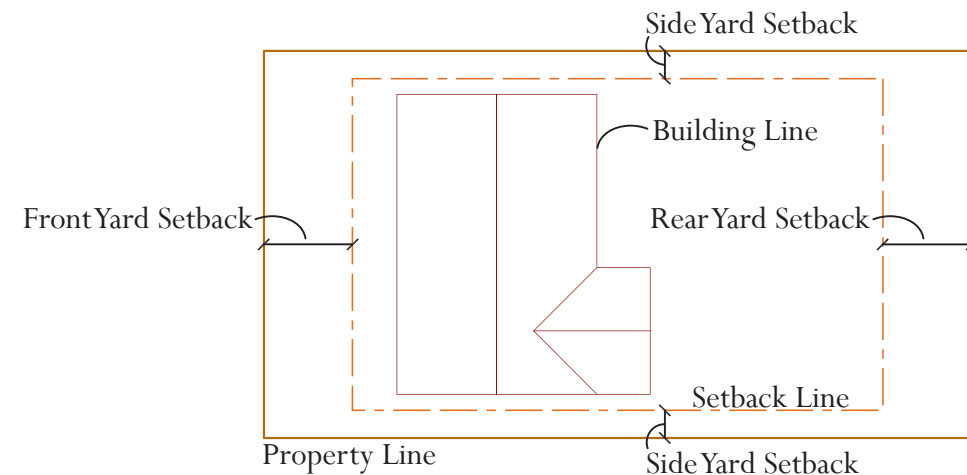
Remember that moving the location of appliances and fixtures may require changing the wiring, plumbing, or gas hookups. Law requires that wiring and gas line changes be done by a professional. Be aware of which walls are load-bearing and consider this when you begin designing your project. Many people looking for more living space naturally think of finishing the basement or adding a second story. Unfortunately, basements in many older homes have a tendency to leak and this susceptibility to moisture infiltration poses problems to finishing them. Emergency egress is also a concern that may need to be addressed dependent upon the scope of your project. Adding a second story is also sometimes not feasible because the original foundation may be inadequate to support it. Houses built before 1978 may have lead exterior paint, so beware of dust and dispose of paint chips appropriately. Asbestos was also used extensively in shingles, tile and for insulating hot water pipes - it is safe when undisturbed, but requires expensive professional help to remove because the dust is dangerous to inhale. A good rule of thumb to follow is: "When in doubt, leave it to the professionals." This is especially true when you are dealing with changes that could affect the health, safety and welfare of the building's occupants.

What are setbacks? What is a building line?

The lot your home sits on has invisible lines known as setbacks. Simply put, setbacks are the minimum distance between the building line and the property lines as measured in the front, rear and side yards. Minimum setbacks oftentimes will vary from one area of a city to another, so verify your project will fit before you invest too much time and money in it. The short definition of a building line is the extreme overall dimensions of the building's exterior walls or any part of a primary structural

Questions to Ask Before You Start

support or component, which is nearest to the property line. For the complete definitions, check the City's zoning code available online at www.wdm-ia.com. The diagram below shows the relationship between the property line, setback lines, and building lines for a fictitious parcel.



Budget and Financing

How will we finance our addition?

Unless it's a really small project, you will probably need a loan. The National Association of the Remodeling Industry (NARI) has a great website with tips for homeowners. You can find it at <http://www.nari.org>. See their article entitled "Budgets 101" to determine your DTI (Debt-To-Income) ratio and decide what size of payments you can afford.

How much are we willing to spend?

Base your decision not only on the amount of money available, but, again, on how long you plan to live in your house. If you expect to move in the next few years, limit the money you spend to an amount you can recoup when you sell. If a remodel or addition increases your home's value well past your neighbors', you may not get your full investment back. Assessed property values can be found on the Polk County Assessor webpage at <http://www.assess.co.polk.ia.us>. If you think you will live there for ten years or more, it is probably safe to spend more to make a home "to grow old in."

Do our means match our dreams?

You should know how much your renovation or addition is likely to cost before getting

too committed to it. Categorize what you plan to do into *wants* and *needs* and match your *means* to your *priorities*. After determining your needs and finances, ask several reputable contractors for an estimate. If your desires exceed your means, consider whether you can reduce the scope of your project without losing what you really desire. Another option is to have the work done in stages – it costs more in the long run, but there is less of an immediate financial blow. If neither option works, keep saving, building credit and planning! It will only make your dreams that much better when they are finally realized.

Final Steps

Will we do the work ourselves or hire a contractor? Do we need help designing our renovation? Will we hire an architect? If we are designing our own, what additional research might we need to do?

Minor renovations are often within the capabilities of the average homeowner, but for any sizable renovation or addition it is a good idea to hire a professional. See the NARI homepage (<http://www.nari.org>) for advice on how to find an experienced contractor. Their "How to Select a Remodeling Professional" brochure provides valuable tips on what to include in your contract. The contractor will determine the materials needed and will manage the entire construction process. A good contractor may be able to draw up simple plans and elevations for approval, as well. However, most contractors are not designers. If you need design help or your remodel is exceptionally complex, you should contact an architect experienced in residential design. They will work with you to develop a design and construction drawings for your project, and can give suggestions on experienced contractors in the area.

What do we need in order to get a building permit? What codes/ordinances apply to our project?

Questions regarding permits, codes and so forth should be directed to the City. Call 515.222.3620 or check the City's website at www.wdm-ia.com.

Call before you dig!! How do we locate utilities?

Before doing any digging, no matter how big or small, request a utility service locate by calling Iowa One Call at 1-800-292-8989 or 811 at least 48 hours prior to all excavation. Iowa One Call is a free service and can be found on the internet at www.iowaonecall.com.

Proportion, Style & Context

Cartoonists are masters at manipulating proportions. By exaggerating just a few features here and there, they can turn an average-looking politician into a bumbling caricature. We are able to laugh at cartoons because we are naturally aware of proportions in people. We are not always quite so skilled, however, at recognizing when we have created “cartoonish” proportions in our own houses.

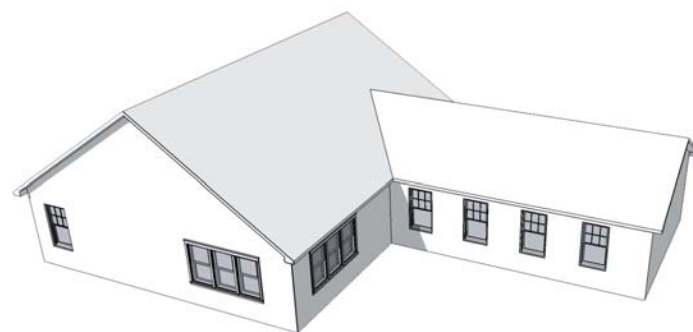
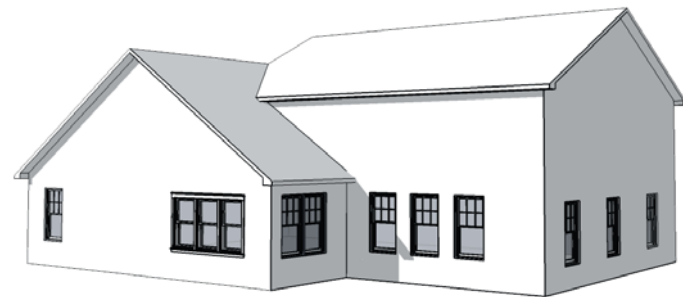
Like a person, a house’s parts and pieces must be well-proportioned in order to look right as a whole. This section illustrates a few rules of thumb that may help you develop an eye for proportion, style and context.

You may begin to notice around town that there are exceptions to the rules featured here. Some styles may stretch a building’s shape or feature an unusual roofline in order to capture a particular effect. When in doubt, look at your own home and similar examples for guidance – if the original house does it, it may be appropriate in an addition.

Step across the street from your home. Squint just enough so the details start to blur. That will give you a good feel for the shape of the building. Does your house have one or two stories? Is there attic space? Is the house a simple box, or does it have many wings and projections? Is it symmetrical or asymmetrical, tall or short, compact or rambling?

Take note of the other buildings surrounding your home. If you are considering adding to your home, you will want to make sure that the addition does not overwhelm the original size and shape of your home or become out of scale to the neighboring homes.

Bad Examples



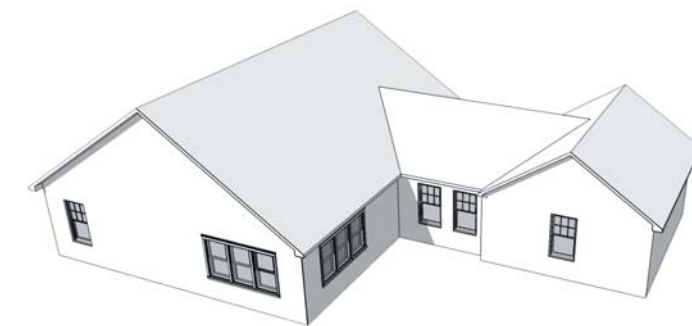
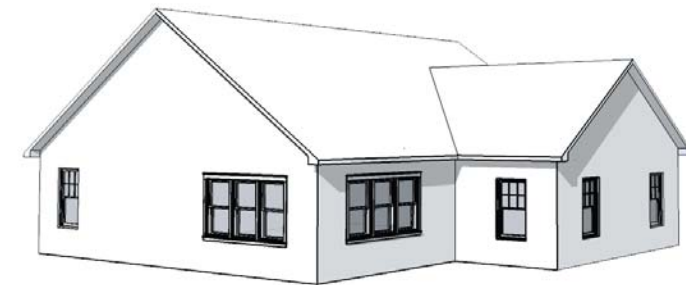
Massing

Pay attention to the natural hierarchy of size. The addition on the left is so large we are confused which part is the main house. The one on the right stays low and defers to the scale of the original.

Proportion

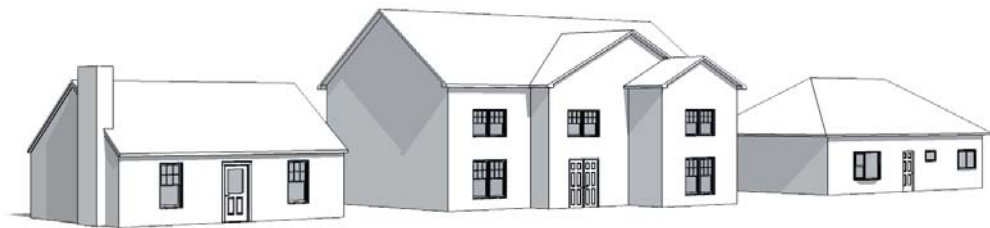
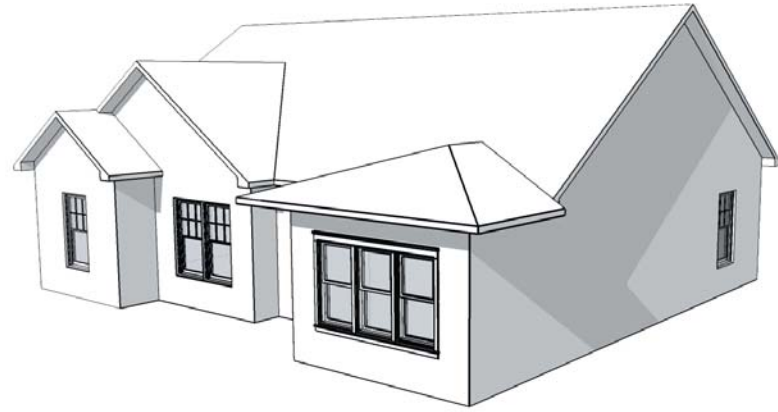
The addition on the left is too long, and its unbroken gable roof accentuates that fact. The one on the right has the same footprint, but it breaks the house into 3 distinct masses.

Good Examples



Proportion, Style & Context

Bad Examples



Style

Some styles dictate a specific roof type or building shape. The hip-roofed addition on the left would look more appropriate on a Prairie-style house. See the “Style Sampler” to learn what’s right for your house.

Context

Most houses were built in a neighborhood with houses of a similar size and style. When adding on, be sure not to change that relationship. Additions should keep a modest profile and attempt to enrich – not replace – the style of the original house.

Location

Some additions look better on one part of the house than another. The garage on the left covers the front of the house, whereas the one on the right leaves the “face” of the house unmarred. Try to be sensitive to the view you give your neighbors.

Good Examples



Getting the Details Right

Why are the details so important?

The details of a building are typically unique to the style and time the home was constructed. When updating or adding on to a home, if the original details that make the structure unique are removed or aren't repeated on the addition, the home loses its character and looks out of place.

How do we evaluate the style or details of my home?

The first step is to take a good look at your home. The National Park Service has several good resources, including an architectural character checklist that will walk you through steps from identifying the shape of your home all the way down to the little details. If your home has been remodeled or re-sided, chances are some of those details are covered up. Removing the siding, even for a small portion of the home, will allow you to see the original details. If trim or other elements have been removed in the remodeling process, you will see scars on the home after you remove the siding. These can tell you the size and shape of the original trim or where windows or roofs once existed. Another way to identify the style of your home is to look for other homes in your neighborhood that are about the same age as your house that have not been remodeled. They may not look exactly like your house, but they can give you some good clues on what your house originally looked like. If your house has lost all of its original trim and siding, refer to other houses of the same architectural style or go to style reference guides for ideas on what trim and materials will be appropriate for your house. Very often there are additions or alterations to an older home that are obviously from a different style or era. These are part of the history of your home and do not necessarily need to be changed or removed.

In General

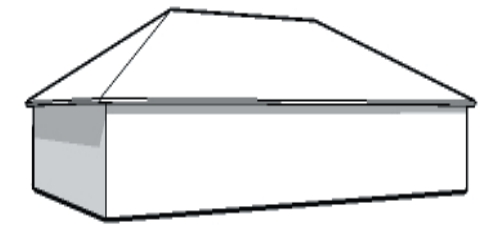
If you are going to add on or update your house, you will want to repeat whatever patterns are already established on your house. Unless you are trying to restore the house to its original design, there is no reason to get an identical match to the existing shape or material and trim. However, the closer you can get to the original, the better the update or addition will look.

Roof

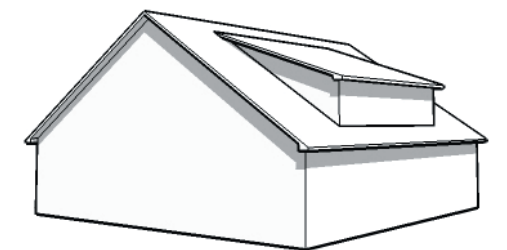
View your home from across the street, and then from as far back as you can in the rear yard. This will help as you evaluate the home's roof. Does the roof have one simple form or many shapes and projections? Does it have a steep slope or a shallow slope? Are the slopes the same all the way around the home, or do they vary? Does the roof start at the same level, or are there upper and lower roofs? Are there dormers on the roof? If so, what shape and size are they? Where are they located, and if there are several, do they have a repeating pattern? What shape is the roof (hip, gable, shed, etc.)? How does the roof meet the walls? Does your roof overhang the wall a short or long distance?

Until the late 1950s, most homes in the area had roof slopes that were steep, most with some type of attic space and dormers. Overhangs varied from long to very short or none at all. When the low-slung hip roofs and large overhangs that were prevalent with prairie architecture became the style in the late 1950s and early 1960s, attic spaces disappeared. As roof styles changed to gable or shed roofs in the late 1960s, the attic space was often displaced with vaulted ceilings.

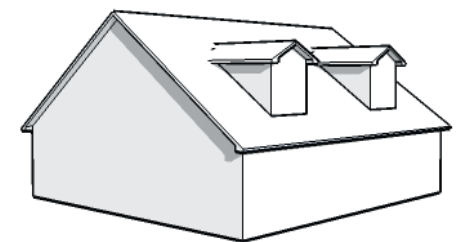
Typical Roof Styles



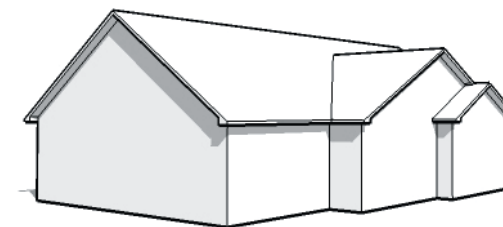
Hip Roof



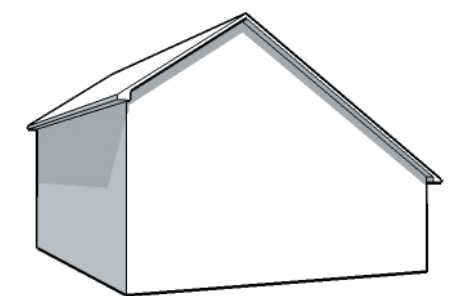
Shed Roof



Dormers

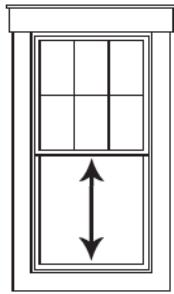


Gable Roof



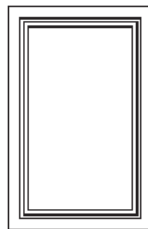
Saltbox Roof

Typical Window Styles



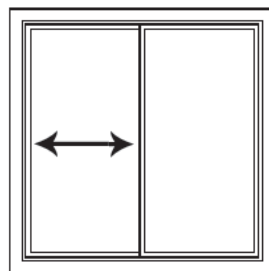
Double Hung

Double hung windows slide up and down.



Casement

Casement windows crank out.



Slider

Slider windows slide back and forth.

Openings

When you look at the windows and doors, start by checking the location. Do they have regular spacing? Are they symmetrical? Are they lined up under each other or centered on something such as a roof peak? What height and size are they - the same or different?

Then you will want to look at what type of window is used on your house. In the Midwest, there are several types of windows you will see, and they typically correspond with the time the house was built. Before World War II, most windows were double hung, some with transoms (fixed glass above the window or door). In the 1950s, we started to see a mix of window types, double hung and casement. In the 1960s and 1970s, windows were primarily of the casement variety. Also note if the window sashes are divided (broken down into smaller sections) and what pattern they are. Older homes with double hung windows usually had divided window sashes, as large sheets of glass were expensive back then.

Next, you will want to look at the type of trim around your windows and doors. What size and thickness is it? Is it the same size all the way around or different? Generally, on homes built prior to the 1940s, wide trim was the norm, but oftentimes the head (top) trim was heavier or had a special design or detail. The sill (bottom) usually projected out past the rest of the trim and sloped away to help drain water. As technology progressed in the 1940s, double hung windows no longer needed window weights. With that change, the need for wide trim also disappeared. A narrower trim, called brick mould, became the typical trim for double hung and casement windows until the 1970s.

Trim

Trim is used to add decoration to a home and emphasize its design elements and architectural style. Many older homes now have the trim covered up or painted the same color as the rest of the home. Very often all you need to do to restore the charm of your home is to uncover the trim and paint it a contrasting color.

Start by looking at where the walls of the house and the roof meet. Take note of the size and patterns of the trim at the fascia, rake, soffit (see the diagram on page 11 for an explanation of these terms) and where the soffit meets the wall. Are there brackets or scars indicating there were brackets along this connection? Are there any special trim, windows or details in the gable? Does the siding meet at the corner, or is there trim at the corners? Are there horizontal bands of trim? If so, are they dividing different siding types or the siding from the foundation? Are the bands lined up with windows or roof elements on the home?

As a general rule, the older the home the more ornate the trim is. After WWII, building materials were scarce. With the flood of soldiers returning, homes needed to be built in a hurry. Trim, banding, brackets and corner boards all but disappeared. What little trim there was did still continue all the way around the home. However, the 1970s saw a shift to only using trim and details on the front of the home, eliminating it on the sides and rear of the home.



Getting the Details Right

Projections

Take note of any special areas that project out or are recessed in along the perimeter of the home. Very often, the entry to the home is pushed forward, recessed into the front of the home or protected by a porch. Are there bays that pop out to define a sitting area or a dining room? Were there porches or balconies on the home that have been removed? Many times these projections or recesses are treated with different siding and more ornate trim and railings.

In the mid 1900s, there was a dramatic drop-off in the inclusion of porches or projections in home design, and many older homes were “updated” by removing or enclosing the porch. There were several reasons for this trend, including changes in how we live. With the availability of new amenities such as air-conditioning, the need for a cool, shaded outdoor space like a porch became less and less. Also, the focus on outdoor living turned away from the street and towards the back yard. See the *Preserve the Porch* section on why you should restore this important feature to your home if it has been removed.



Porch



Bow Window

Materials

As you are looking at the materials on your home, take note of *what* is used (brick, stone, wood siding, shingles, trim), along with *where* and *how* they are used on the home. Are there distinctive patterns such as varying exposures

(distance between each piece) of lap siding or shingles, brick patterns or coursing? What color are the trim, siding, roof and foundation? It may take some investigation to find the original colors used on the home.

You will also want to evaluate the condition of the materials. Is there any deterioration or rot? Is flashing missing? Do joints need to be sealed? Does masonry need tuck pointing? If you decide to replace or repair any areas, take care to match the original materials as closely as possible. Fortunately, most materials used many years ago, such as wood shingles and siding, are still available.

There are also many “new and improved” materials that look like old materials. The temptation is to use a material or product just because you like the looks of it. If you don’t keep your choices close to what materials were originally used, you will start to lose the character of the home and the new construction will look out of place. In addition, be aware that new materials may not perform well in combination with old materials. For instance, new trim materials (such as vinyl, plastic composites or cement fiber) will expand and contract at different rates than the original wood. This may allow gaps to open up, causing the trim to buckle and pull away from the house. Also, new mortar mixes are stronger than original mortar and will cause old brick to break apart.

Typically, homes from the turn of the century to the 1930s and 1940s had narrower (3” to 4” exposure) wood lap siding. Newer homes had wider (7” to 9” exposure) siding of wood or other materials such as asbestos, masonite and metal. West Des Moines, like most Midwestern towns, has neighborhoods composed entirely of homes with all brick siding. Until the 1930s, most foundations were made of brick. They then changed to clay tile or concrete block. Poured concrete foundations were not prevalent until the 1970s.

Color

Color is another important part of the character of a home. Your best source on what colors to use on the house is usually the house itself. Poke around for areas that may not have been painted or sided over. Scraping away some paint may reveal the original color. You need not copy the original colors exactly, but they will give you guidance on what areas to make a darker color and what to make lighter. Research what colors were available and popular when your house was built.

Some rules to follow when picking out colors:

- Trim looks best when painted a different color than the rest of the house.
- Most often trim is a lighter color than the siding.
- Many early 19th Century homes would have several different trim colors.

Getting the Details Right

- Use darker or jewel tone colors for accents on shutters, doors or window sashes in older homes.
- Foundations and roof material (such as shingles with different colors) look best when they are darker than the siding and trim.
- Good siding colors are usually in the earthtone color range, but don't be afraid to have some fun!
- When you choose colors, bring the samples out into the bright sunlight to match and compare. Colors can change in different light, and bright sunlight will often wash out colors.

Mistakes to avoid

Most architectural styles have shapes, materials, trim and details that are unique to that style. Here are some of the most common areas that could make your home look odd or change the character:

Windows:

- If you want to replace your windows, replace them with the same type (double-hung, casement, etc.) and the same size of window as the original units.

Siding:

- Changing the exposure (wide vs. narrow spacing) of the siding and removing or covering up the trim will have a big impact on the character of the home. Try to get as close to the same type of siding and trim as you can.

Porches:

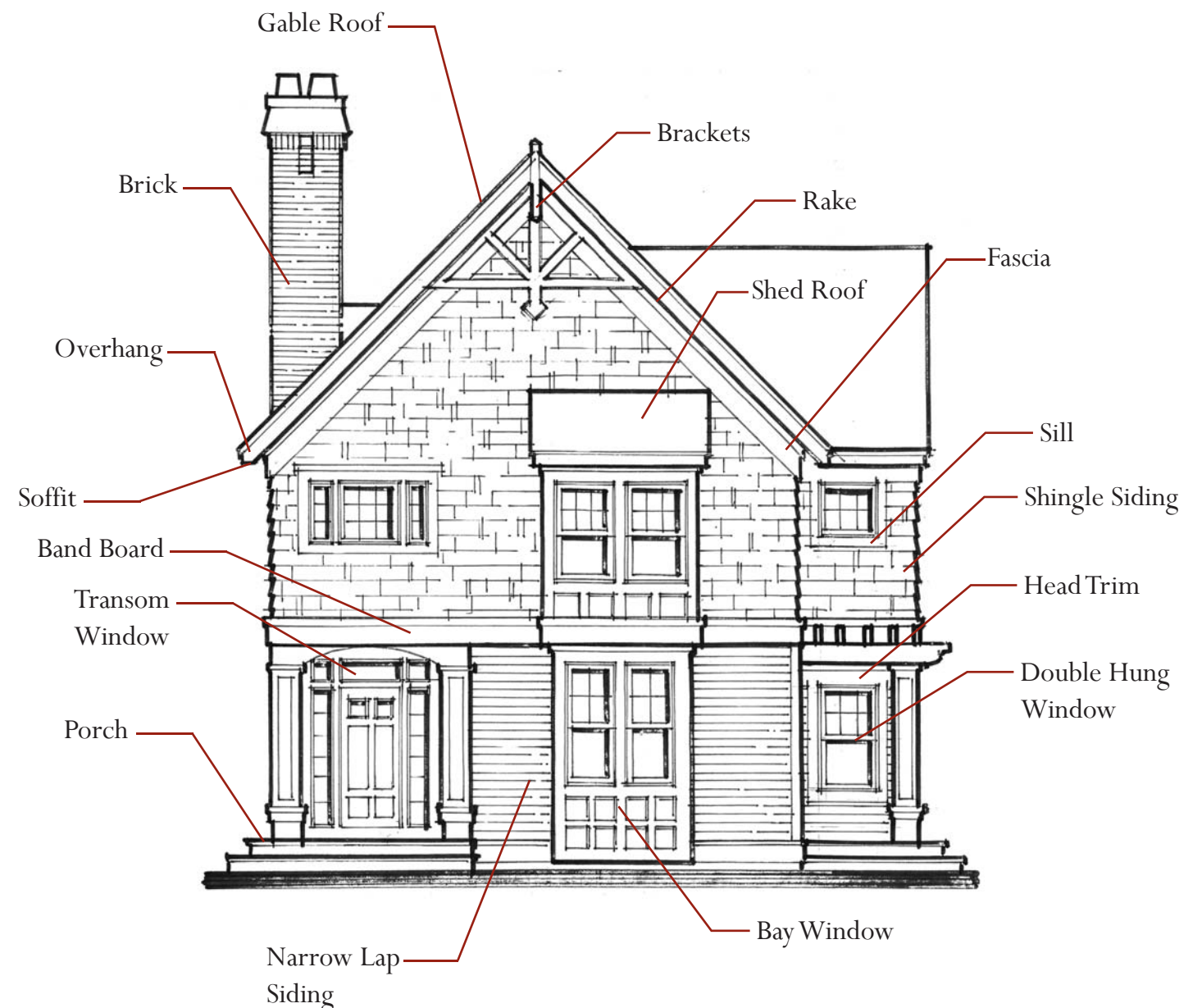
- It's tempting to increase the size of your house by capturing this space, but it really serves an important function both in aesthetics and connection to the neighborhood (see *Preserve the Porch*). If you really feel the need to enclose this area, try to keep the original porch elements visible and make the enclosure as transparent as possible.

Additions:

- Additions look best when they follow the same roof forms and shape of the original home. Sometimes this gets very tricky to make everything work with the old and new building. This may be the best time to ask for help from a professional.

Putting it all together

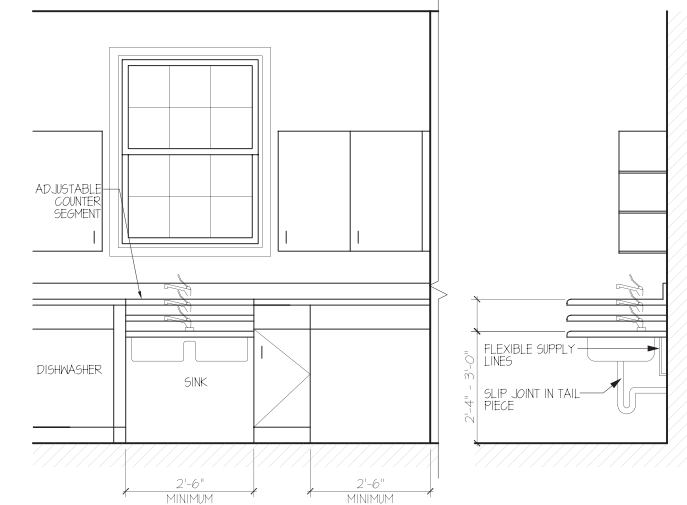
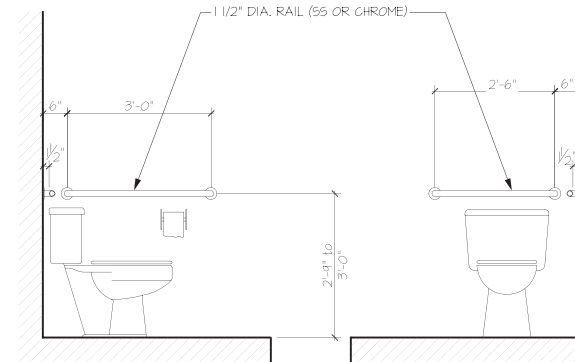
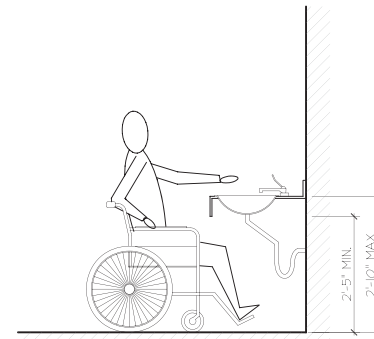
You will find as you start making decisions on spaces and materials that you can't solve every problem and you will never have the perfect home. Start by setting priorities. Choose materials and designs that address several issues rather than one. Keep preserving the character of the home as one of those top priorities and good design will happen. Don't be afraid to ask for help from professionals in the field. Chances are just a few hours of their help will save you many dollars and hours of frustration in the long run.



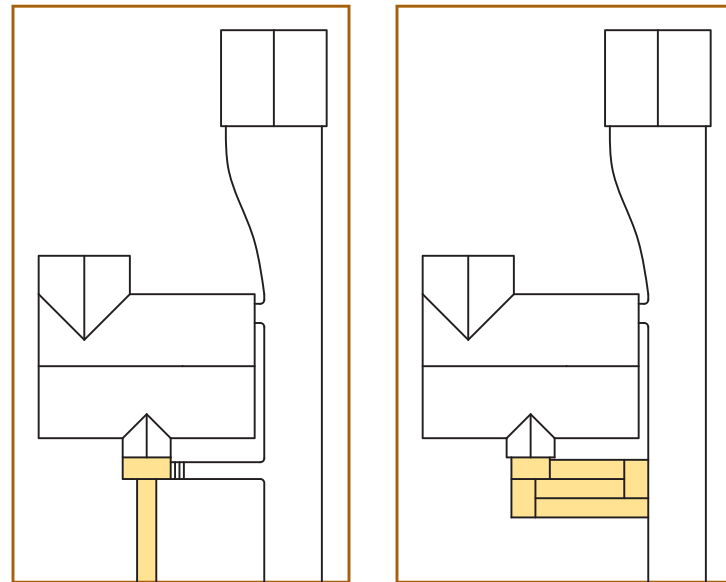
Handicapped Accessibility

When someone in the family develops a disability, everyone has to adjust – even the house. Depending on the disability, a house might need widened doors, ramps, lowered countertops or grip bars in the bathroom. Stairs frequently become a barrier, separating the handicapped family member from areas of the house.

Because a disability is usually an unexpected and inconvenient change, we often make these alterations in the most direct, utilitarian way possible – without thinking of this as an opportunity to enhance “quality of life”. But these times of transition are the very times when thoughtful design can most ease a handicapped person’s challenges. Below are some ideas about designing for accessibility *and* quality of life.

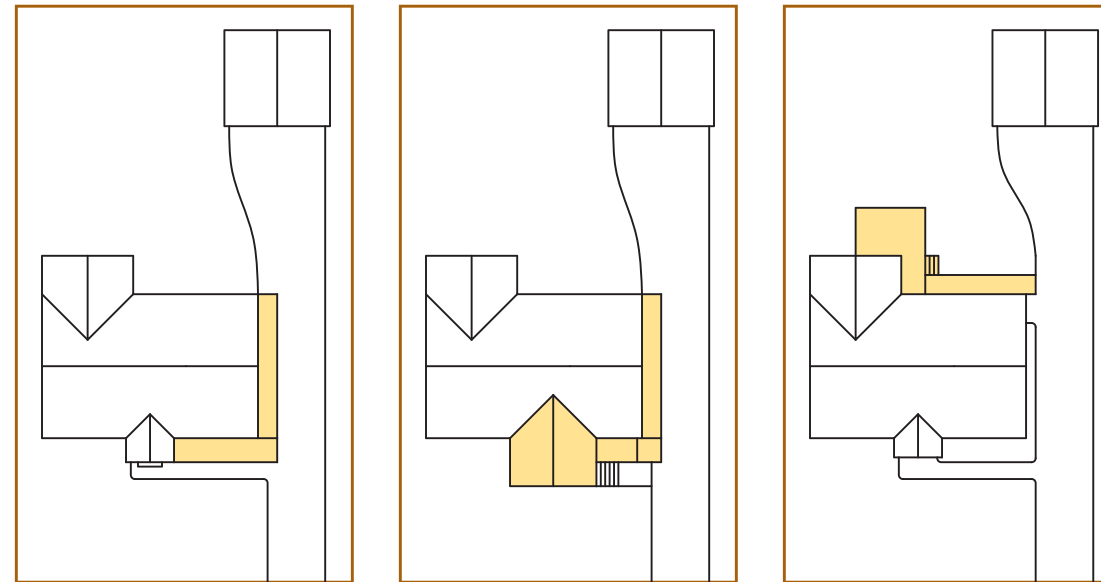


Bad Examples



Try not to cover the front of the house with ramps.

Good Examples



Wrap ramps around the side or back, possibly combining them with a deck or porch.

Tips

- Store frequently-used items within easy reach.
- Replace knobs with levers for those with reduced motor skills.
- Add grip bars by the toilet and in and around the bathtub.
- Avoid level changes and rugs with edges that are easy to trip on.
- Install brighter lights for those with reduced vision.
- Use landscaping to screen the view of a ramp from the street.
- See the “Fair Housing Accessibility Guidelines” available at www.hud.gov or contact the City’s Building Development Services by phone at 515.222.3620 for more info.



Image from <http://www.countrylandscapes.com>

Why Landscape?

1) To Add Usable Space

Not only does landscaping provide for more aesthetically pleasing views, but for practical uses as well. Outdoor “rooms” can be an extension of your indoor spaces and should fit with the homeowners lifestyle.

2) For Ecological Purposes

Located among flood prone rivers and creeks, West Des Moines is a city that is quite aware of the natural processes happening around it. Native plants and materials are not only appropriate, but the most successful as well. With a little creativity, natural and human environments can coexist for the benefit of both.

3) To Increase the Resale Value of Your Home

The first thing a prospective homebuyer sees is the exterior of a home, including the front yard. If you are a homeowner planning to move within the next ten years, landscaping will help to entice future prospective buyers and provide for a quicker and more profitable sale.

Landscaping & Curb Appeal

Landscape Design Principles

1. Keep It Practical and Plan Ahead

- Plan the design and budget the costs before you start. Lay out a plan for the entire space before you begin, even if you don't plan to do all of it at the same time. This will give the space a uniformity and make it look whole instead of pieced when finished.
- Make spaces that are functional for your lifestyle.
- Make the size and maintenance needs a function of your available time.
- Make sure that you're looking at more than just the aesthetics of your yard. Check the site's grading and make sure all water is draining appropriately. Adding elements such as a retaining wall or patio may effect drainage patterns.

2. Incorporate Hardscapes

- Create unique outdoor social spaces with hardscapes such as a deck, patio, fountain, or terrace.
- Design an arbor or trellis to shade a seating area.
- Create focal points with water features, ponds, and paths.
- Block out nearby annoyances with screens and walls.
- Don't be afraid to incorporate hardscapes into a space. They can provide seating, views, and function to your yard.
- Incorporating different materials such as wood, colored concrete, pavers, metals, rock, and brick can help make your space unique and give extra colors and textures.



Photos from: Perennial Gardens by Linda Grieve, Inc.
<http://www.perennialgardens.biz/>

3. Complement and Frame Built Architecture

- Use plants to soften and enhance building foundations and facades.
- Create views and frames that enhance certain sections of your house and screen others.
- Frame and enclose views of your yard. You can enhance the views of your yard with tree and shrub placement and create a privacy fence to your backyard with hedges and vines.
- Use plants to screen out nuisances such as noise, pollution, and light.
- Match your materials to that of your house to create a cohesiveness between the existing and planned elements.
- Use similar paving patterns, colors, and textures that are already existing.



After



Before

Using plants around your house will help soften the foundation and enhance the facade. Plants help merge the ground level with the house and diminish strong boundaries, lines, and angles.

Images from <http://www.hgtv.com/hgtv/gardening/>

4. Design Planting Beds

- Choose an appropriate size and shape that matches the existing landscape. Helpful Hint: Use your garden hose to lay out the shape and size of the bed before you start digging.
- Choose an interest point that you want to focus around and make the bed balance around it.
- Pick plants that follow the same scale as your home. Make sure that the plants mature size will still look appropriate and fit in the size you have allotted for it.
- Use variety, but carefully. Be creative with your design by using unique plants or a theme such as a Japanese garden. Be careful, however, too much variety can become distracting. Placing the same plants in different spots around your house can help provide some unity.
- When designing beds around your house make sure it fits with the rest of the landscape. Look at four guiding principles for your design: harmony, balance, proportion, and variety.



Images from <http://www.countrylandscapes.com>

5. Use Materials and Plants Native to Iowa

- Using plants that are native to Iowa can be beneficial. They are hardy to this region, meaning that they tolerate the weather conditions better than plants that come from a different region. Their water needs and ability to tolerate soil texture and acidity are already suited to this region. Plants that are native often require less maintenance than others as well.
- Look at the plant's requirements for sun, shade, fertilizer, soil texture (sand, silt, clay), and water and assure the plants will thrive where you are placing them.
- Check the plant's zone, meaning where in the United States it likes to live, if you are using non-native plants. Des Moines and southern Iowa are zone 5 while northern Iowa is zone 4.
- Using materials and grading that copy historical patterns of Iowa will give your garden a feeling that it was meant to be there.
- Some native materials are: Sandstone, Limestone, Iron, Sand, Gravel, and Quartzite

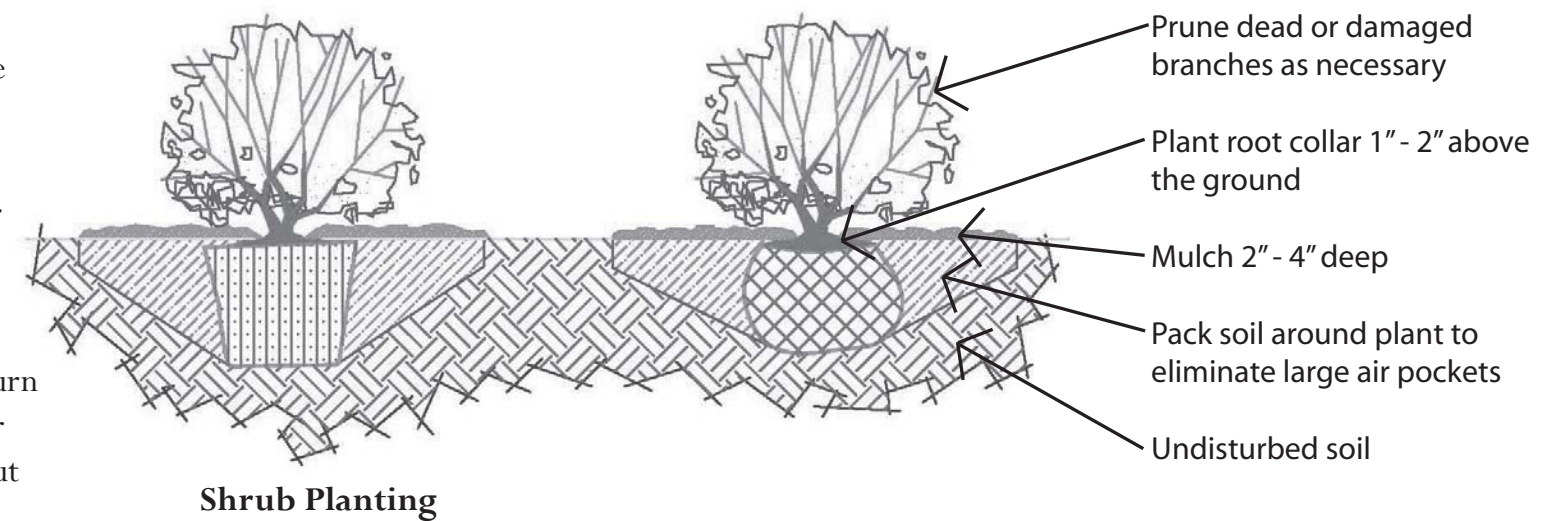
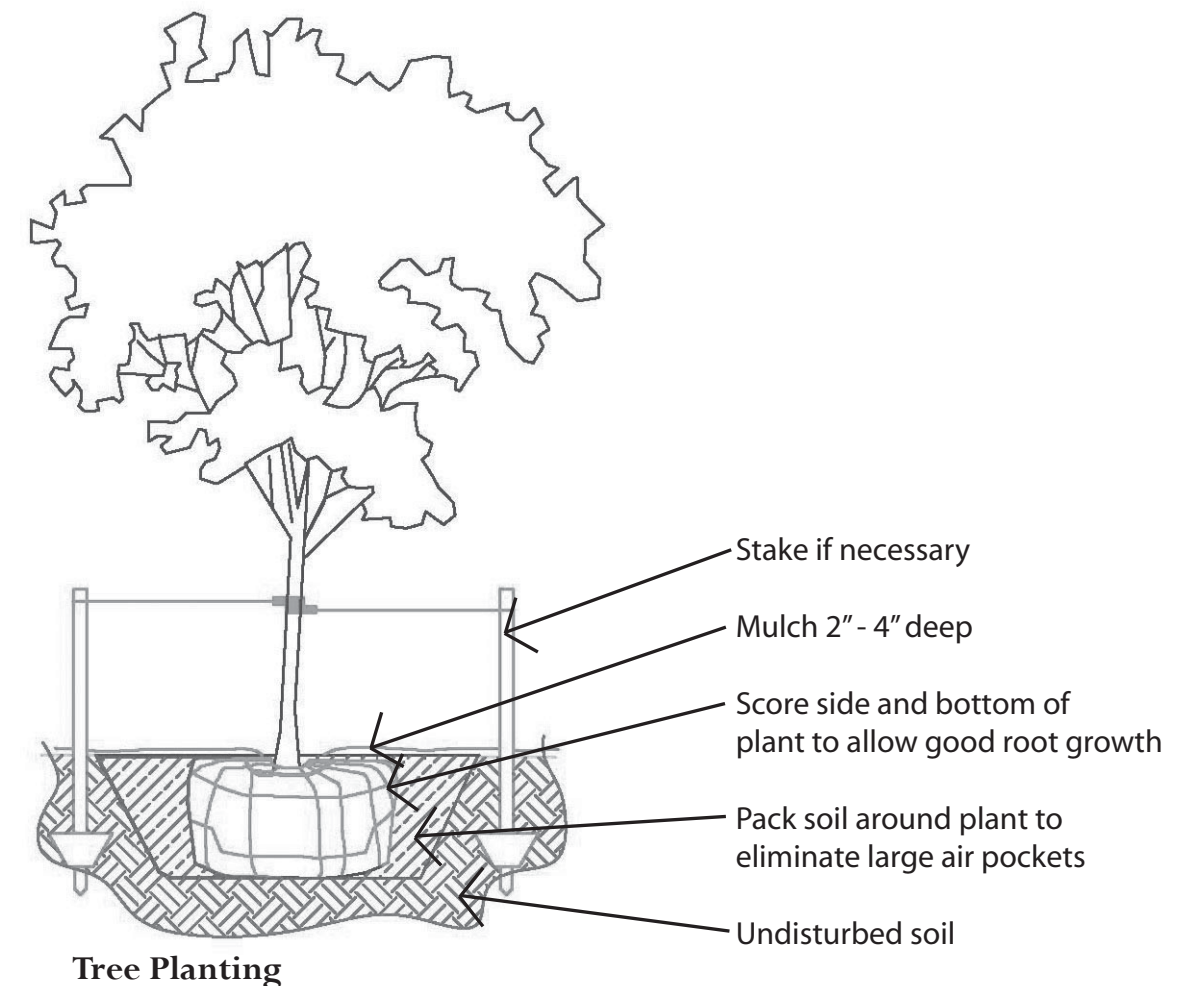
6. Provide Year-Round Interest

- **Spring:** Use plants that have different flowering patterns and colors. Bulbs such as Siberian Squill and Tulips bloom early followed by flowering plants.
- **Summer:** Combinations of leaf patterns, textures, and colors along with bark color help create a unique space during the summer months. Use flowering perennials and annuals to add extra color and attraction to your yard.
- **Fall:** Choose plants that have bright fall leaf colors to create a dynamic, ever-changing landscape.
- **Winter:** Consider plants that have an interesting branching pattern, bark color, or texture. Don't forget about evergreens! They can add that much needed touch of green to your yard during the winter.

Landscaping & Curb Appeal

How to Plant a Tree or Shrub

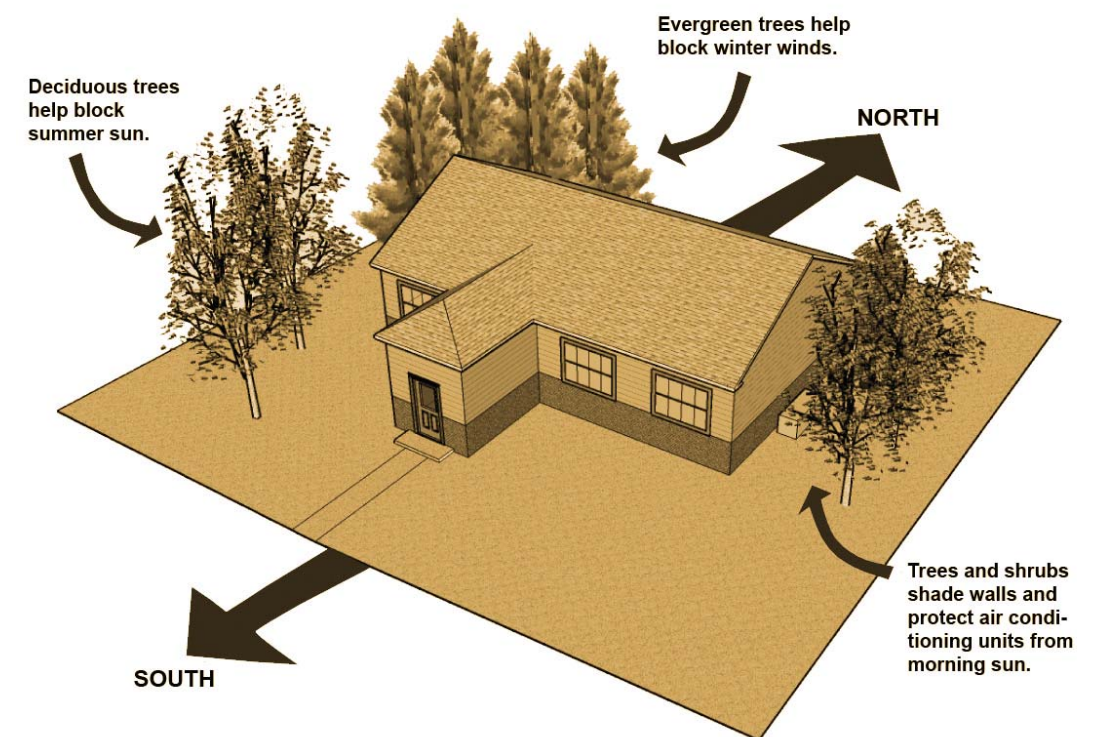
1. Contact Iowa One Call at least 48 hours prior to excavation. They will arrange with the utility companies to have your yard marked of all underground facilities. Their number is: 1-800-292-8989.
 2. Dig a hole that's roughly two to three times the width of the root ball or the container. A large hole is important to give the developing roots room to grow in soil that has not been heavily compacted.
 3. The root collar is where the roots branch out at the base of the trunk. Locate this on the tree or shrub and make sure the collar is partially visible when planted; 1" - 2" above ground level is a good rule of thumb. This helps to determine how deep to plant your tree or shrub. If the hole you've dug is too deep, return some of the soil until the plant is at the level you want.
 4. Remove the plant from the container and trim any roots that are circling around the root ball. Loosen the roots and direct them down and outwards while placing the plant in the hole.
 5. If your soil has a large amount of clay or sand now is a good time to add any soil amendments. Additives can help the plant retain water, provide nutrients, and give the plant what it needs to thrive.
 6. Make sure the plant is standing straight, and move soil back around the root ball while carefully compacting to assure that no large air pockets remain.
 7. If planting a tree, it may be necessary to stake it. Conditions with possibilities for mower damage, wind damage, or vandalism may require staking. Only stake the tree if it will be susceptible to damage. Leaving a tree unstaked promotes a healthy root system and proper growth.
 8. Water the tree making sure the root ball itself is getting wet, not just the dirt around it. Water until the root ball is thoroughly saturated.
 9. Mulch the planting area with 2" - 4" of wood mulch, leaving a small circle around the base of the trunk. Mulch will reduce water surface evaporation, provide nutrients and protection, and slow the growth of weeds.
- Watering your tree is a crucial part of its survival. Overwatering will cause root rot, and the leaves will turn yellow and fall off. Underwatering won't give your tree the energy it needs to grow a strong root base for the coming winter. A good standard is to water when the dirt under the mulch is dry. This should be about once a week, possibly more during hot summer months.



Landscaping & Curb Appeal

Do's and Dont's of Landscaping

Do's	Dont's	Reason
Do stake your tree if conditions require.	Don't stake your tree unless truly required.	Leaving a tree unstaked helps promote a strong root system that will help keep the tree anchored.
Do water and fertilize your plant.	Don't water and fertilize unless you know the correct amounts and appropriate products.	Applying incorrect products could be fatal for your plant. Ask a specialist about correct water and fertilizer application.
Do use mulch around trees and beds.	Don't over mulch or mulch too close to the base of the plant.	Mulch can provide many benefits to your plant, just make sure it stays away from the base.
Do prune your shrubs.	Don't prune off more than 1/3 of the plants overall size in one year.	Pruning is very beneficial, but pruning too much can make the plant suffer.
Do use plants where they will help block wind and sun and provide shade during summer months.	Don't place plants where they won't survive.	Plants can help provide protection from the elements, like shading your air conditioner and blocking winter wind, but they also have their own growing requirements. Pick appropriate plants for both aesthetics and function.
Do incorporate hardscapes.	Don't be afraid to call in a professional.	Wood, stone, and other materials can help define your outdoor spaces, however, their structure and stability is very important. Reaffirm that you are using correct materials and designs to make your hardscape last.
Do buy plenty of materials.	Don't get stuck having to substitute different materials in your design.	It's always better to have extra materials than not enough. If you have extra you can incorporate them in another part of your garden for added cohesiveness.



Parking Solutions

Many older houses have just a 1-stall garage or none at all, leaving homeowners to park a second car in the driveway or on the street. If this is your situation, you may be interested in seeing what other options are available. This section explores the different off-street parking possibilities for various lot sizes and conditions. Hopefully you will find a solution that works for your home!

Things to consider

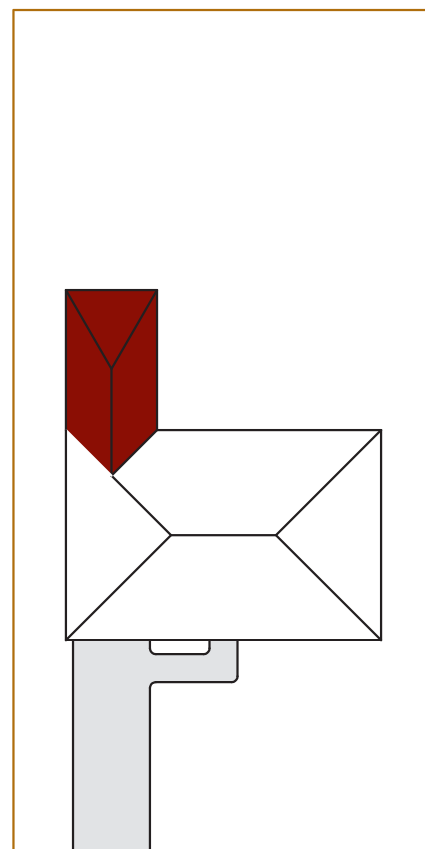
Decide which type of garage, attached or detached, will best fit your needs as well as your lot configuration. Lots adjacent to alleys may have more flexibility as to where you can locate or add on a garage. Setback requirements vary for attached garages versus detached garages. (See *Questions to Ask* for more information.) Also, check with the City for possible height restrictions. Setbacks for a “pull-off” will be less than those for a garage. This may be a good option if your space to expand is limited.

Typical Dimensions

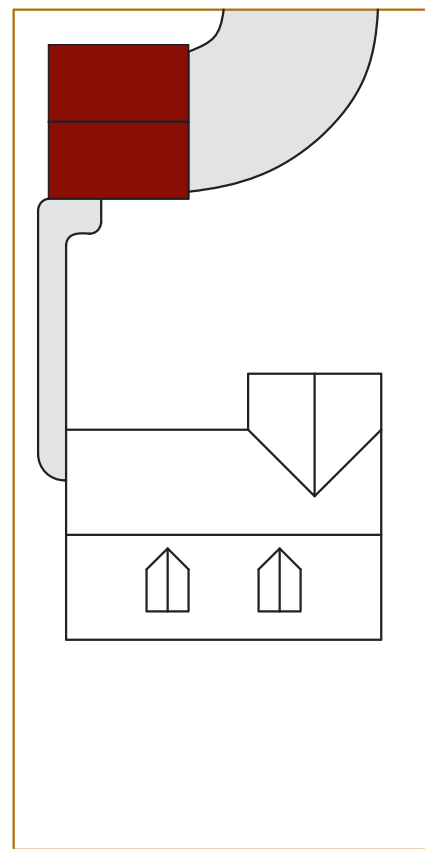
The standard garage door sizes are 7’ to 8’ tall and 8’, 9’, 10’, 16’ or 18’ wide. Custom sizes are also available. Allow about 2’ on either side for opening car doors.

An average 1-stall garage is 12’ x 22’. A 1½-stall garage might be 18’ x 22’, and a 2-stall garage should be around 22’ x 24’. Heights will vary according to roof style and pitch.

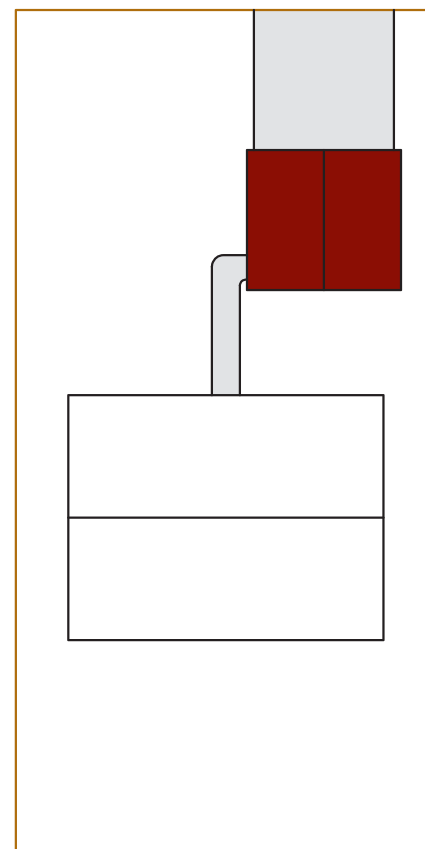
Solutions For Narrow Lots



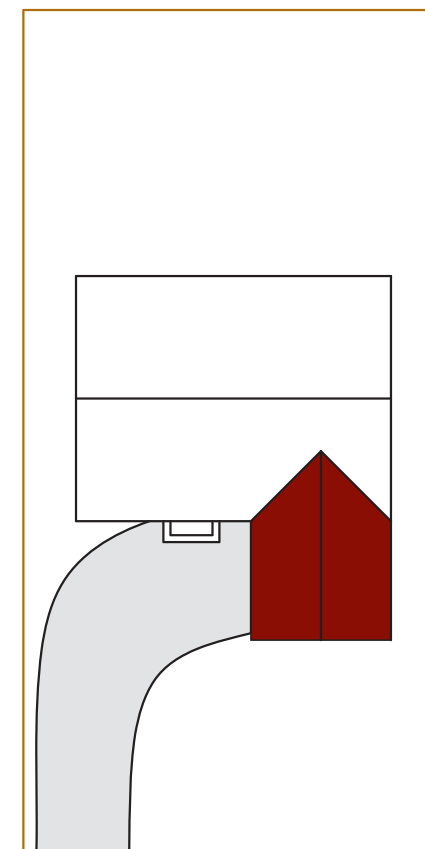
Tandem



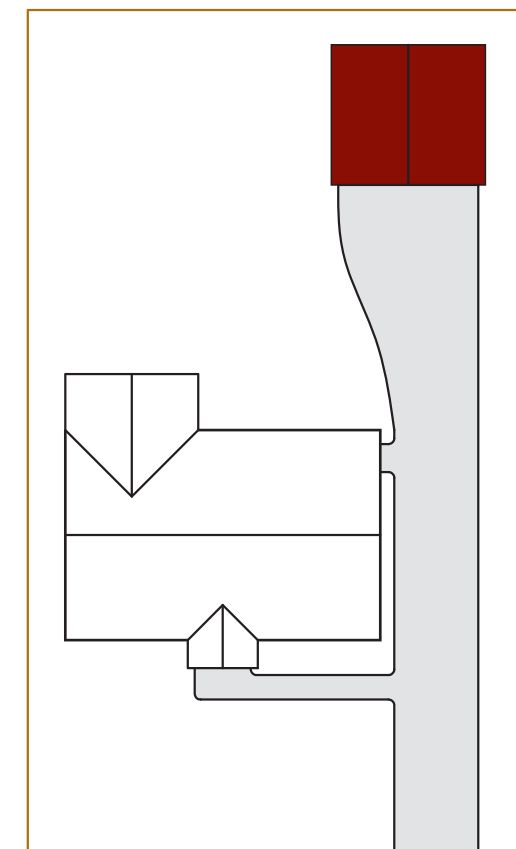
Alley Loaded (Side)



Alley Loaded (Straight)

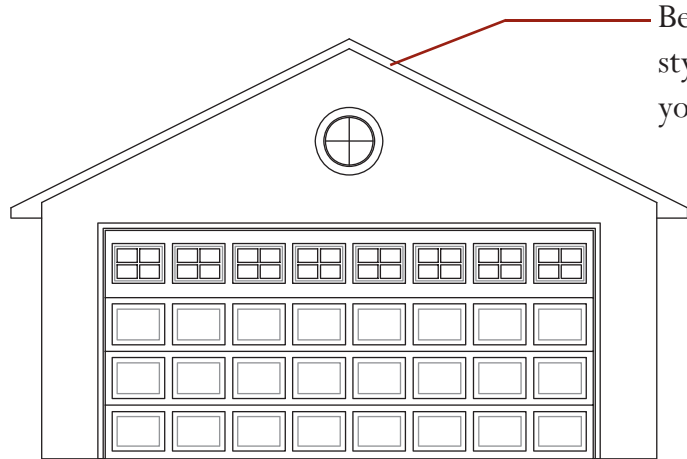


Front (Side Loaded)



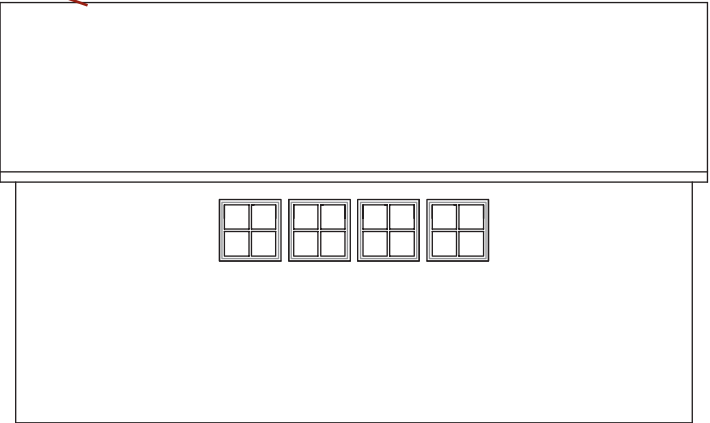
Detached

Parking Solutions



Front Elevation

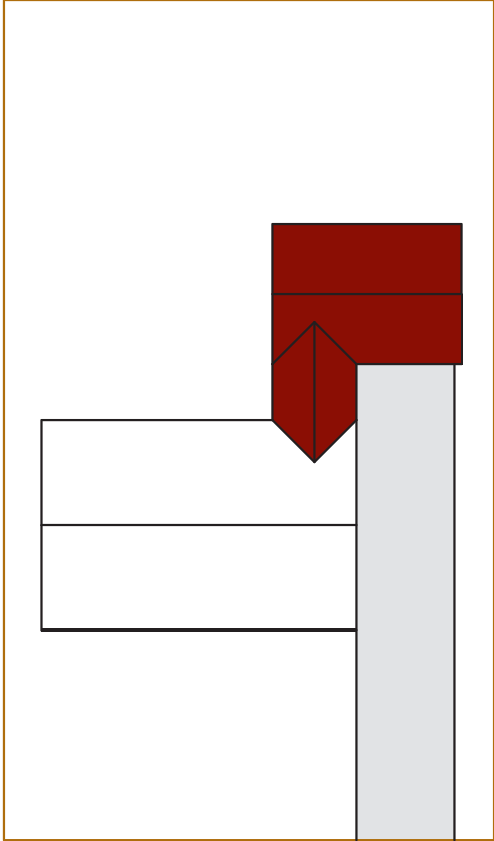
Be sure to match the style and proportions of your existing house.



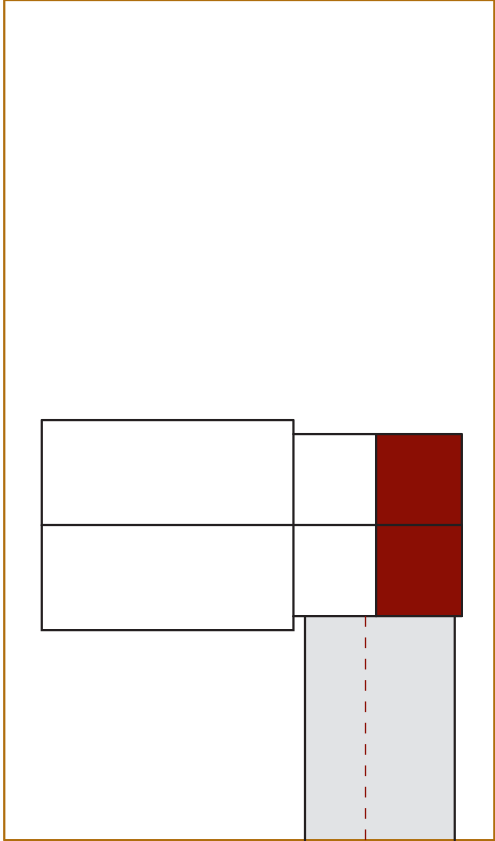
Side Elevation

Because of its size, a garage can have a strong impact on your experience of the yardscape. Make it a positive impact by thinking of ways to integrate it into the landscape. The garage may double as a garden workshop or playhouse, or it may frame a space for entertaining. A detached garage might provide the opportunity to create a garden path to the house. Finally, remember to always match the style of the house!

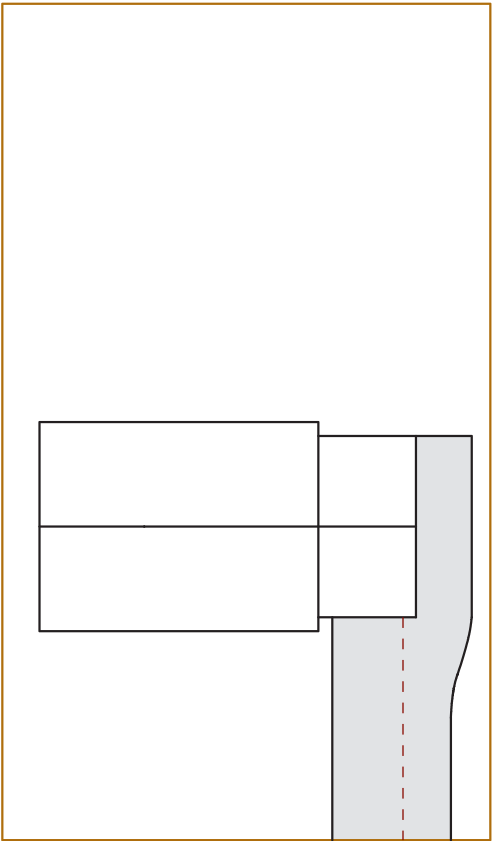
Solutions For Wide Lots



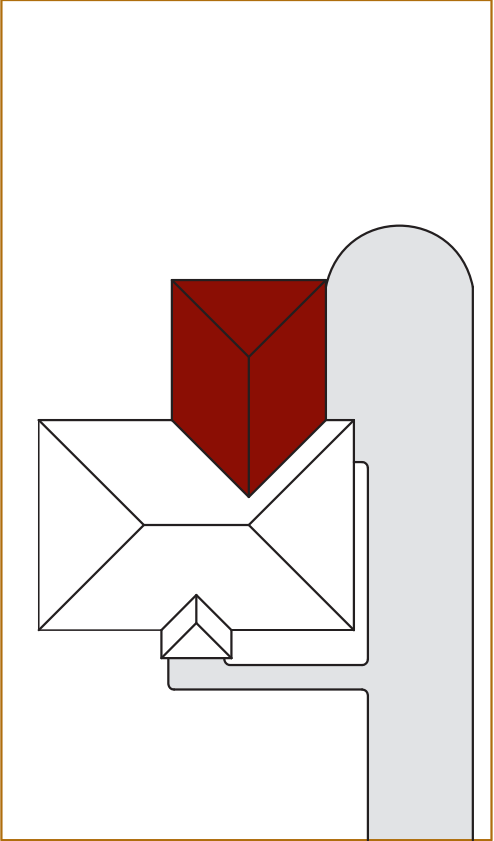
Rear Semi-Detached



Side Expansion



Pull-off



Rear Attached

Preserve the Porch



For many people, the phrase *front porch* evokes nostalgic images of old-time America. We imagine kids playing with the dog, grandma knitting in the rocking chair, or neighbors stopping for a friendly chat. The porch was a place for long talks, for watching sunsets, for cheerful hellos and lingering goodbyes.

Architects call this sort of special place a “transitional space”. You can find them in every culture. Just think of an English cottage garden or a Japanese courtyard. Each is a transition, or meeting-point, between public and private. America’s classic transitional space is the front porch. It offers us shade and a cool breeze, but it also serves a more important role as our connection to the community.

In the middle of the last century, three new inventions – air conditioning, the television and the automobile – dramatically altered the way Americans lived. Air conditioning made the indoors cool in the summer. Cars made it so we could live further from our neighbors. The television made it easier to get our news and entertainment in private. For these and other reasons, tightly-knit neighborhoods of yesterday began to give way to the more individual-centered “home of tomorrow”. The television became our link to the community, and the garage replaced the front porch physically



without replacing its important social function. Many folks living in older neighborhoods saw their front porches as wasted space and walled them up for extra room.

Still, some people felt like something was missing. In the 1960s and 1970s, some individuals started

fixing up the old houses and restoring their porches. It was the start of the historic preservation movement. After a while, people liked the friendly old neighborhoods so much they started building new ones just like them, even when they had to alter the zoning code to do it! There’s a name for that movement, too. It’s called “New Urbanism”. Areas influenced by New Urbanism try to re-create denser, pedestrian-friendly neighborhoods. Today, older homes with intact front porches are in high demand all over the country.

If you own a home with a front porch, preserve it! It is worth the extra expense and effort. You may be tempted to close in the porch for more space. Before you do, try adding to the back or finishing the attic or basement. If you can’t avoid enclosing the porch, consider using a lot of windows so you can maintain that valuable connection to the street. The rule of thumb here is:

Preserve the Porch!



What is Green Building?

As you explore the options for your home addition or renovation, it is important to think about ways to accomplish this while, at the same time, being environmentally conscious. *Sustainable design* and *Green building* are terms you hear a lot these days, but what do they mean? These terms refer to designs and buildings that seek to sustain or maintain a healthier built environment by reducing their consumption of non-renewable resources which, in turn, helps to minimize long-term impact on the natural environment. Now that you have an idea of what *Green building* is, we’ll give some examples of how to incorporate it into your project.

Location & Site Selection

Since this book is directed at updating or renovating existing homes, the location of your lot is already set and isn’t something that can be changed, unlike the options associated with new construction. Also, renovating an existing home versus building a new one on virgin ground helps to conserve open space. If you’re planning an extensive addition, orient it for proper solar exposure to help with cooling in the summer months while maximizing opportunities for letting in daylight. The proximity of services (e.g., stores, churches, schools, etc.) and public transportation to established neighborhoods is a benefit to residents as well as the environment.

Water Conservation

Several of the *Renovation Suggestions* in this book involve adding or renovating a bathroom. This provides an opportunity for using water conserving fixtures, such as low flow faucets and shower heads and dual flush toilets. As an example, dual flush toilets help conserve water by offering the user a choice between flushing liquids or solids. The liquid flush mode will use approximately 50% less water than the solid flush mode.

Energy Efficiency & Renewable Energy

Use passive heating and cooling to decrease your monthly energy bill. This can be accomplished by facing the majority of your home’s windows to the south, limiting windows on the north side of your home, and using thermal mass (e.g., concrete) to store up solar heat from the sun. When planning a sizeable addition, keep in mind that you may need to increase the size of your heating and cooling systems to compensate for the additional square footage. Making sure your home is well insulated and properly sealed to

prevent air infiltration are inexpensive and relatively easy ways to make your home more energy efficient. Take advantage of daylight as much as possible to reduce the need for artificial light and use efficient lighting fixtures where artificial lights are necessary. More expensive and complicated options to consider as part of your project include solar panels and geothermal heating and cooling systems. Be sure to weigh the costs versus benefits of any upgrades you’re considering to help eliminate surprises later on. See www.energystar.gov for tips on choosing energy efficient appliances and for tools and resources to reduce your energy bills while improving comfort.

Resource Conservation & Efficiency

Maximize resource conservation on your project by limiting its size to only what you absolutely need versus what you may want. The use of advanced framing techniques, engineered lumber, manufactured roof and floor trusses and materials and products containing recycled content are excellent ways to put the “green” into an addition or renovation. Salvaged materials are a great way to save money on your project and they may offer an opportunity to be used in creative ways. By having a waste management plan in place, materials from the demolition phase of your project can be reused or recycled rather than going into a dumpster and ultimately ending up in a landfill.

Health & Indoor Air Quality

There are many products and materials you can use that will help maintain a healthy indoor environment during construction and after completion. Look for and use Low/No VOC (Volatile Organic Compound) paints and adhesives, formaldehyde-free insulation and natural/renewable flooring products. Use natural or mechanical ventilation to replace stale indoor air with fresh air from outside. Have your home tested for radon gas and install carbon monoxide detectors as well. Many older homes were built with products that we now know are potentially harmful to humans, such as lead paint and asbestos. Be sure to take the necessary precautions to contain these items and make certain to dispose of them properly during your renovation project.

Daylight



Skylights can be used to reduce dependency on artificial lighting.

Re-use



Salvaged door knobs can be used as towel hooks in a bathroom remodel.

Style Guide

There are literally *hundreds* of house styles in America. Illustrated here are some styles most common to the older neighborhoods in West Des Moines. Beside each illustration is a short list of characteristics typical of that style. You can use these to help identify the style of your house. From that same list, you can also begin to develop a set of guidelines that will become the “rules” for designing your addition.

Find more information on styles in [A Field Guide to American Houses](#), by Virginia and Lee McAlester.

Vernacular

- Built by the “common man”
- Unique to the region
- Used available materials and technology
- Honest design: common forms such as gables
- Plain surfaces with little detailing
- Porches are common



Early 1900s

- Revival or period styles influenced by World’s Fair and travel by wealthy individuals
- Machine age allowed details & trim to be created easily
- Designed for narrow lots
- Typically Craftsmen details & materials
- Catalog and plan books provided access to these styles across the U. S.



Post WWII

- Soldiers returning from the war started the baby boom, increasing the need for housing by almost 50%
- Birth of the suburbs
- Repetitive designs driven by single builder/developer created subdivisions
- Compact, basic plans were efficient and economical to build
- Detached, single car garages are common
- Ideas for renovating this style of house can be found in the *Cape Cod Renovation Suggestions* section of this book



Mid-Century (1950s & 60s)

- Optimistic period of time
- Automobiles and television transform society
- Prairie Style architecture & advances in construction materials and methods influenced designs
- Low, sheltering roof that expressed structure
- Asymmetrical design with 360° architecture
- Mix of window types
- Ideas for renovating this style of house can be found in the *Ranch Renovation Suggestions* section of this book



Late 1960s to early 1970s

- Lot size and square footage of homes increased
- Living focused on rear yard
- Informal living areas (family room, rec room, den) added to designs
- More open floor plans
- Appearance of the split-level
- Design emphasis on the front of the house with typically a mix of brick and siding
- Casement windows are typical
- Attached garages, but not pushed to the front
- Ideas for renovating this style of house can be found in the *Split-Level Renovation Suggestions* section of this book



The Cape Cod

Introduction



Why are they so popular?

Cape Cod cottages can be found in neighborhoods all over the country. Why is this old standard so popular? Is it the efficient boxy shape or the way the Cape Cod evokes an old-time, colonial American feel? Whatever the reason, the Cape Cod style has enjoyed many revivals over the years. Each time, the familiar exterior has remained largely the same while materials and interior layouts were updated.

When designing your addition, try to employ the same philosophy. Additions should look like a natural outgrowth of the original. It may take some time and a little research to develop a feel for the “logic” of the Cape Cod style, but the end result will be well worth it! A good way to begin is to explore the style’s history.

History of the Cape Cod

The Cape Cod originated in the early days of colonial Massachusetts. Its solid boxy plan and uncomplicated roof were a practical response to strong winds and sandy soils. The first story was low, usually around seven feet, and the space under the steep roof held small bedrooms. Trim was minimal, and there was little or no roof overhang.

Some Cape Cods were designed to expand from a “honeymoon cottage” with the fireplace at one end to a complete, symmetrical house surrounding the now-massive central fireplace. Roof and walls were originally covered with split cedar shingles, and the small double-hung windows were divided into many panes of glass.

Levittown and the post-war building boom

Because of the effects of the Depression and WWII, almost no new housing was constructed between 1930 and 1945. With the end of the war, thousands of soldiers returned home and began raising families, causing a sudden and enormous demand for new housing.

Builders began to apply assembly-line methods developed for the war effort to this new housing crisis. One of the first builders to offer mass-produced suburban housing was William Levitt. He value-engineered the building process, offering a few mass-produced options that fit the price range of young soldiers. People were drawn to the low prices and modern conveniences like washers and GE kitchen appliances. Levittown and other developments were enormously popular, and builders across the country imitated their example.

The Cape Cod and other Colonial styles were popular during the 1940s and 1950s. The original homes were very simple, but many homeowners have since expanded their homes to meet their changing needs.

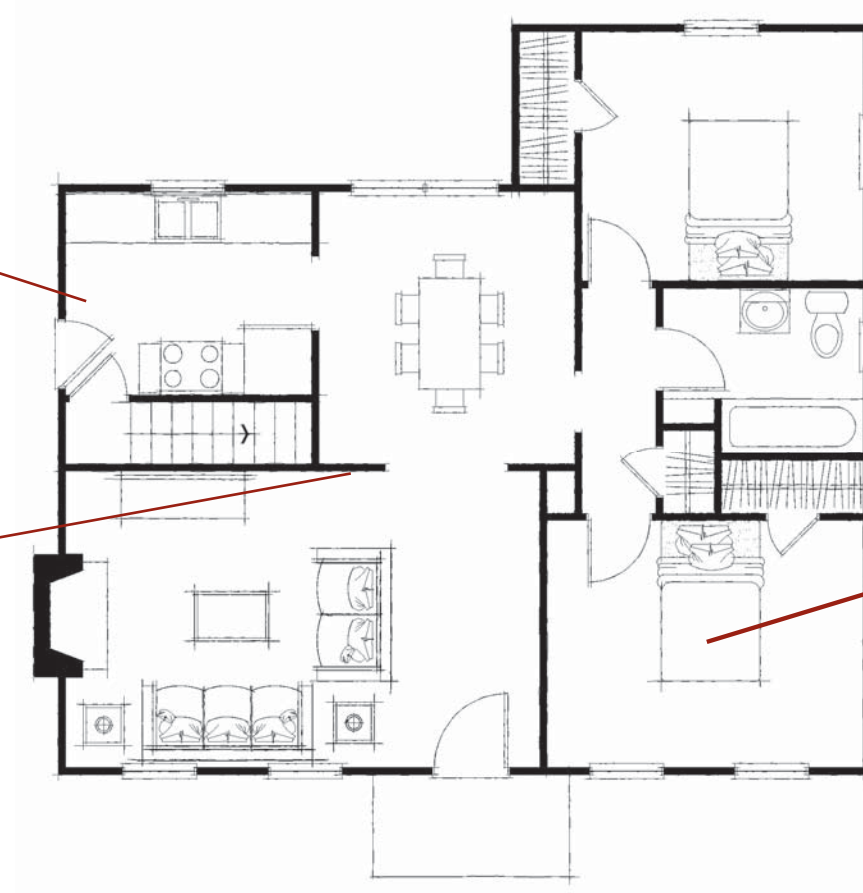
The Cape Cod

Introduction

Original Floor Plan

The kitchen is tiny and is tucked in a back corner.

Walls divide the dining room, kitchen and living room.



Bedrooms are modest, and there is only one bathroom for the entire house.

Original Elevation

White siding and dark shutters are common in post-war Colonial styles.

Windows are double-hung with many small panes of glass.



Cape Cods have a simple, rectangular form and steep gable roof.

Trim is minimal, and there is almost no roof overhang.

Cape Cods are usually just 1 or 1½ stories tall.

What updates are usually needed in a Cape Cod?

Many Cape Cods were built during a time when informal spaces like family rooms were less popular. The kitchen was separate from the living area and dining was formal, whereas in houses built today the kitchen is often the social “heart” of the house. Cape Cods predate today’s large master suites with their private baths and large closets. And sometimes it can be hard to find a good place for a computer desk or home office; after all, “working from home” was a foreign notion in the 1950s!

In the remainder of this section, we will give examples of ways you might transform your Cape Cod to meet your needs. As you read, please remember that the ideas outlined in this book are meant as general guidelines – not as hard rules. Try to be sensitive to the ways your house may be different from these examples. If you don’t find the style or addition you want, you might look in the other sections for ideas. Many of these ideas could be carefully adapted to match the different visual “rules” of your house. Below is an outline of the Cape Cod additions that we will explore in the next several pages:

- A large family room addition with plenty of room for entertaining.
- A new “master suite” and outdoor living area

The Cape Cod

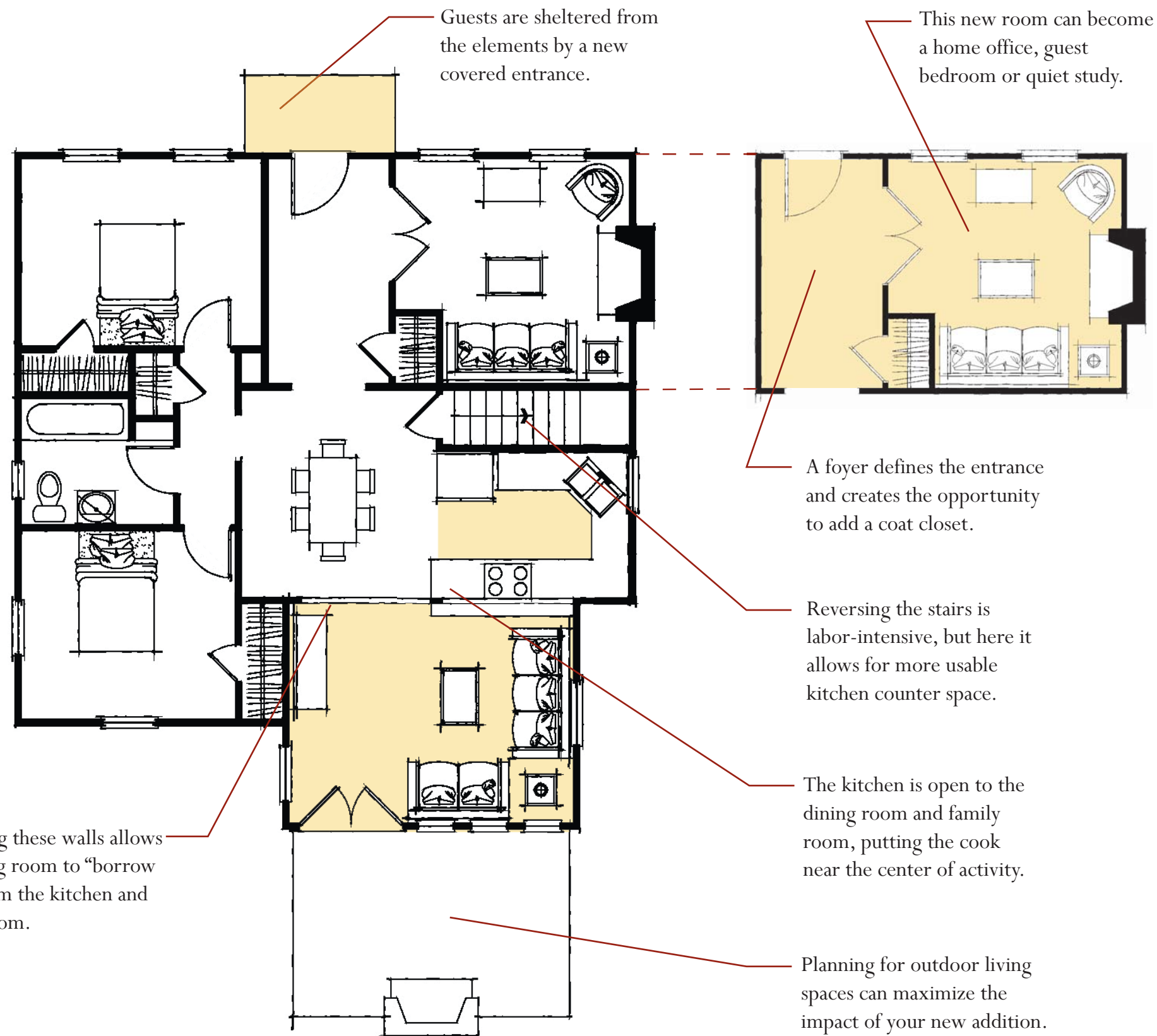
Family Room Addition

This new family room addition addresses four limitations of the original Cape Cod: lack of shelter over the front stoop; a tiny kitchen set apart from the living area; the absence of a quiet “away space” for overnight guests, or for bills or reading; and, of course, the need for lots of casual living space.

A new Colonial-style covered entrance protects visitors from rain and adds character to the façade. With the new family room handling entertaining needs, the living room can now transform into a separate foyer and “away space”. The covered entrance, foyer and a much-needed entry closet all help give visitors a more gradual sense of entry, which continues as they pass through the dining room into an open, light-filled new family room. Reversing the basement stairs gives the kitchen more counter space and frees it from the need to double as a hallway. And with confining walls removed, a person in the kitchen will never be far from the action! The dining room and kitchen flow easily to the spacious family room, where French doors invite guests to explore the back patio.



Original Floor Plan



Revised Floor Plan

The Cape Cod

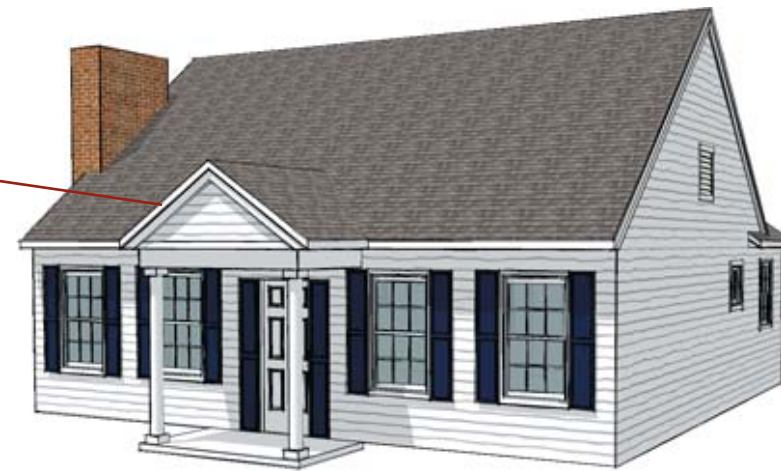
Family Room Addition

Outside, the addition blends in with the scale and style of the original house. Creating a huge 2-story family room here would have destroyed the character of our Cape Cod. You can often achieve the same spacious impression with a much lower tray or vaulted ceiling while keeping a modest exterior profile. Following the “rules” of the style here helps us to sensitively match our modern needs to a traditional exterior. The end result looks as if it were made by the same craftsman who built the original.

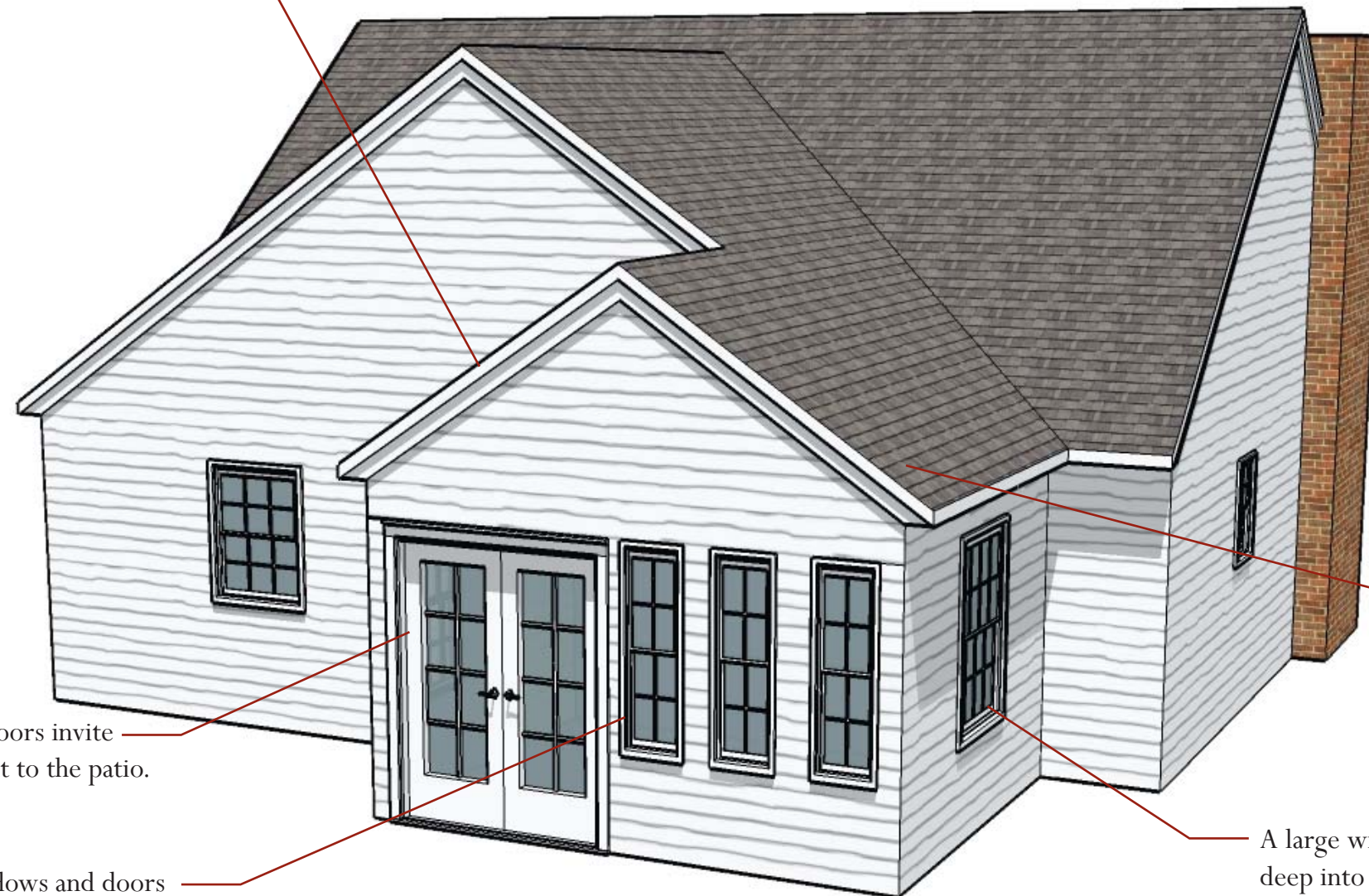


Original Elevation

A portico, or columned, covered entrance, adds charm and protects visitors from the rain.



The trim on the addition matches the original house.



French doors invite guests out to the patio.

Windows and doors match the original style.

A large window can let light deep into the interior.

The addition is modestly proportioned to match the house and neighborhood.

Revised Elevations

The Cape Cod

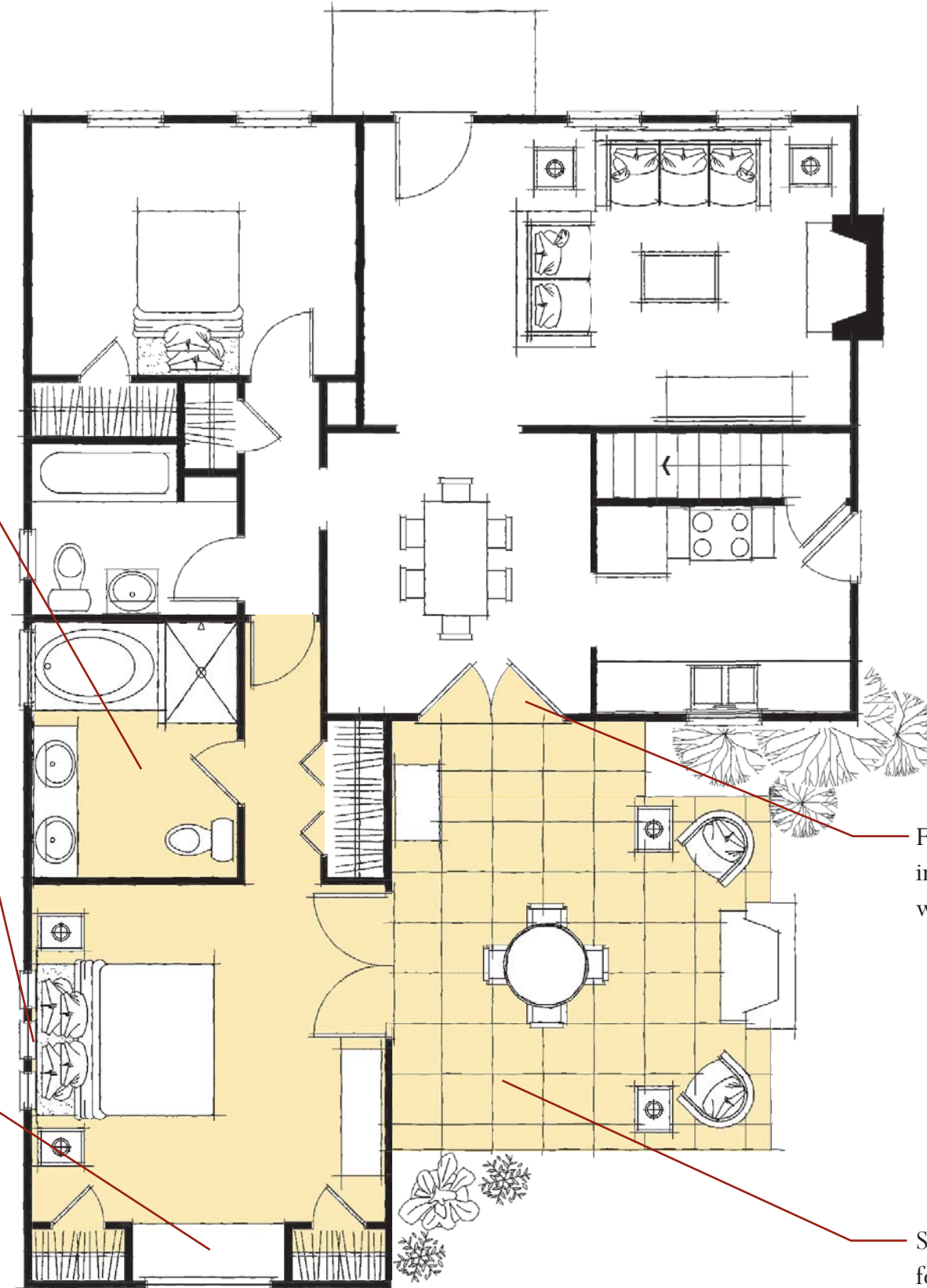
Master Suite Addition

Master bedrooms have come a long way since 1950. Back then, homeowners were happy if they had their own closet – and a private bath was a luxury! Today, the master suite has become a place to retreat from the demands of work and family.

Our new master bedroom addition is insulated from the main house by a bath and private hallway. The expansive new bathroom is conveniently near the closet, and there are new supplementary closets flanking a cozy window seat. Entering the master suite is like stepping out of worldly cares – you pass from the public living areas to the bedroom hallway. From there, owners pass through a threshold to a private hallway, and then into the peaceful and private bedroom space. The main living area can be re-entered via French doors after a refreshing stroll through the outdoor courtyard.



Original Floor Plan



A new private bath is conveniently located across from the original master closet.

High windows help to maintain privacy while still letting in light.

A window seat fits snugly between his-and-hers closets.

French doors can be inserted into the original window opening.

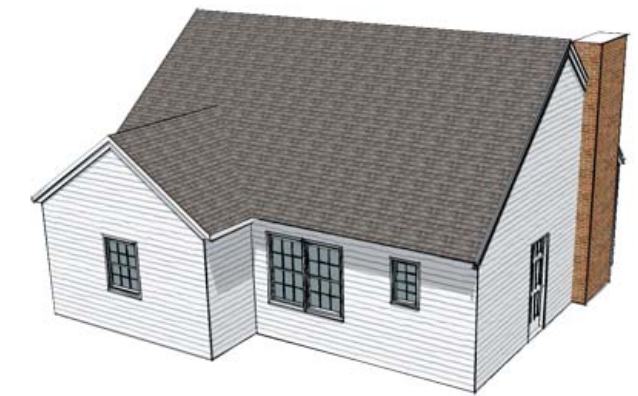
Step out to the courtyard for a breath of fresh air.

Revised Floor Plan

The Cape Cod

Master Suite Addition

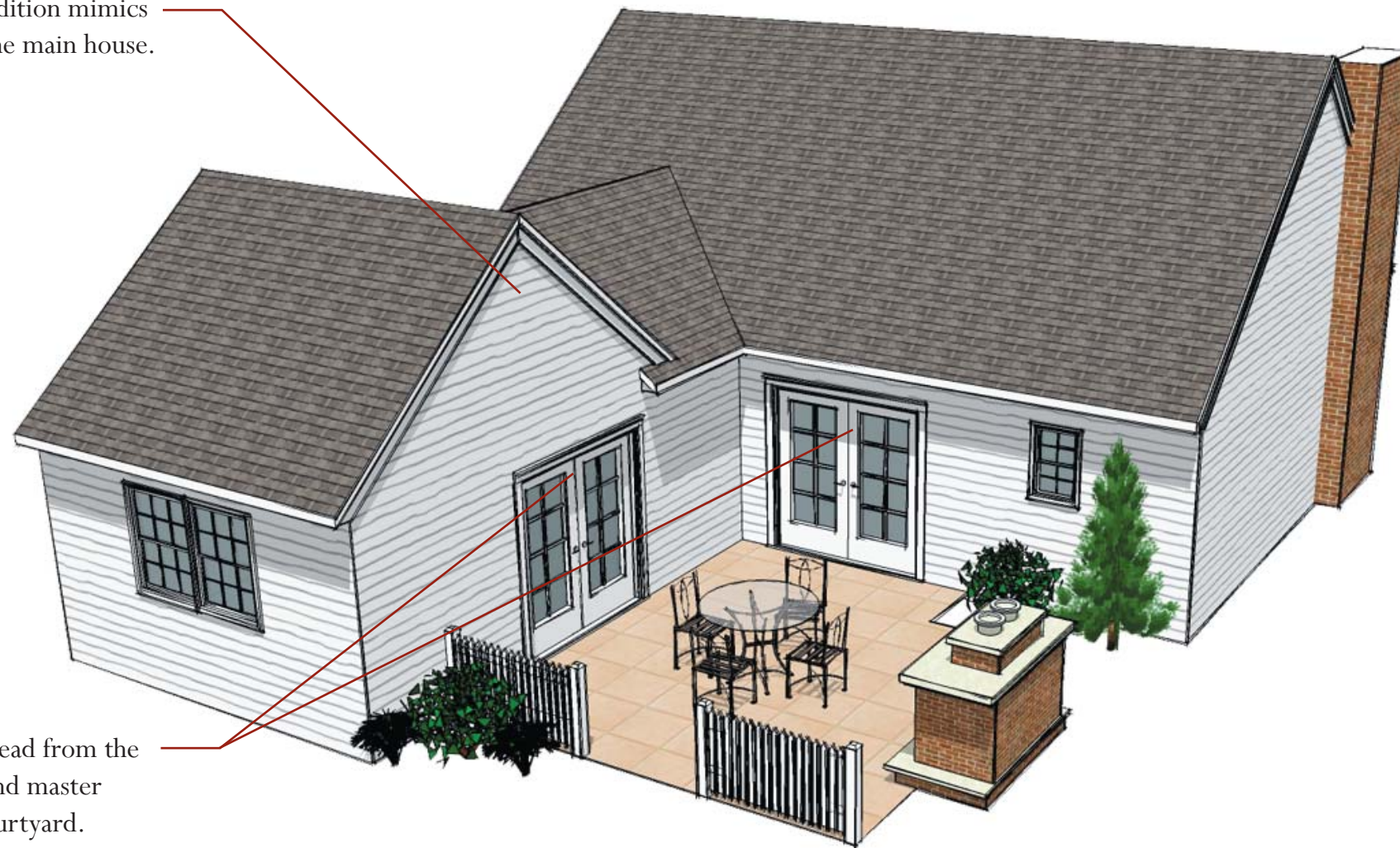
The courtyard is a true outdoor living space. Surrounded by the house on two sides and a fireplace on another, it is sheltered from traffic and neighbors – the perfect place to relax. The fireplace becomes the focal point of the space and is a natural meeting point for friends and family.



Original Elevation

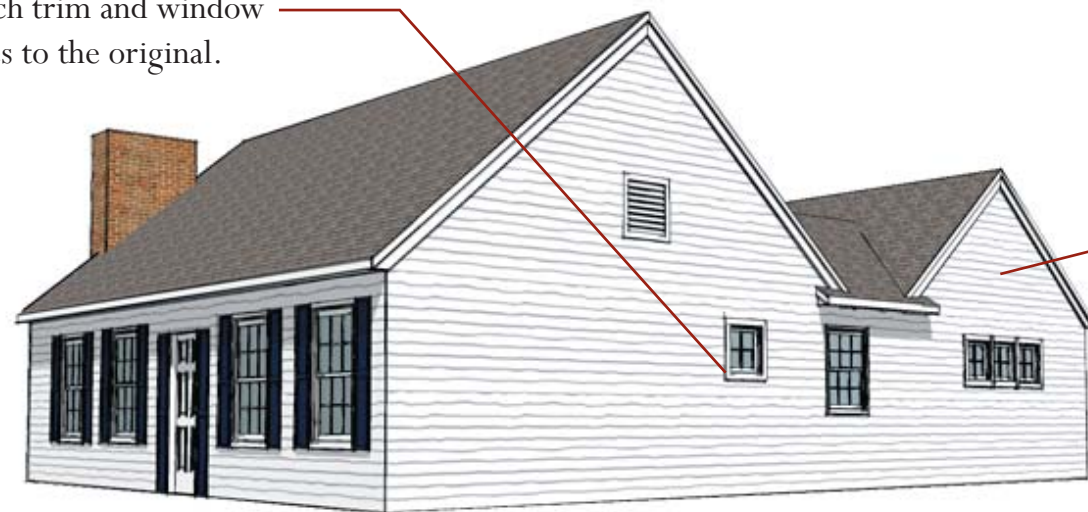


The gabled addition mimics the shape of the main house.



French doors lead from the dining room and master suite to the courtyard.

Match trim and window styles to the original.



The master suite addition creates a private courtyard.

A gable roof on the addition breaks up an otherwise long and awkward shape. The master suite looks like a tiny cottage that has been attached to the main house.

The Ranch

Introduction



History and Features of the Ranch

The Ranch style started in California in the 1930s and spread all across the country in the 1950s and 1960s. The style is loosely based on the long, low Spanish Colonial mission buildings of the Southwest. Like the Spanish buildings, Ranches are one story and have a long, narrow rectangular form. They are different, however, in their details and roof – here they borrow influences from the Prairie and Craftsman styles. There is often a low hip roof with wide overhangs – a hallmark of the Prairie style. Trim is very plain. The plan of the Ranch is more open than preceding traditional styles; for example, kitchen and dining are often open to one another and sometimes also to the living room. Picture windows are popular in Ranches, and a 1-or 2-car garage usually extends from one side of the house. Some Ranches have shallow gable roofs and vaguely Colonial details – an attempt to give the otherwise plain façade some character.

The Ranch’s popularity rose with the spread of the automobile. Whereas styles of the 19th century built high on narrow lots (because people had to travel by foot or horse to get to the nearest train), the Ranch was designed for the new automobile age. The car made it possible for people to spread out on a spacious suburban lot far from the workplace. The Ranch was meant to express this new American mobility with its sleek, straight lines and efficient yet open plan. It also did away with fussy details of the past, responding to the Modernist movement against traditional decorative “waste”. There was an emphasis on casual modern living, sending residents out to their spacious backyards to grill on patios or decks.

Prairie Style

The Prairie Style was invented by famed architect Frank Lloyd Wright. Wright believed that low hip roofs, open floor plans and horizontal lines were the architectural embodiment of the American spirit. His “Usonian” houses influenced the way people thought about houses; modern features like carports and open floor plans found their way into later styles like the Ranch. Because of their relationship to the Prairie Style, Ranches can sometimes be remodeled in that style or in the related Craftsman style.

When attempting a major stylistic remodel, be very careful to identify characteristics of the new style. Compare your existing house to those characteristics. Does your house already have a hip roof with wide eaves? Does the trim around windows and doors need updating? Are there Colonial-style details that need to be removed? If it becomes clear that major changes are necessary, you should contact a qualified architect to help you with the design.

You will have to decide how much detail you want – transforming your house into a Prairie Style masterpiece can cost a fortune, while a more modest update might be more affordable and still give you the effect you want.



The Ranch

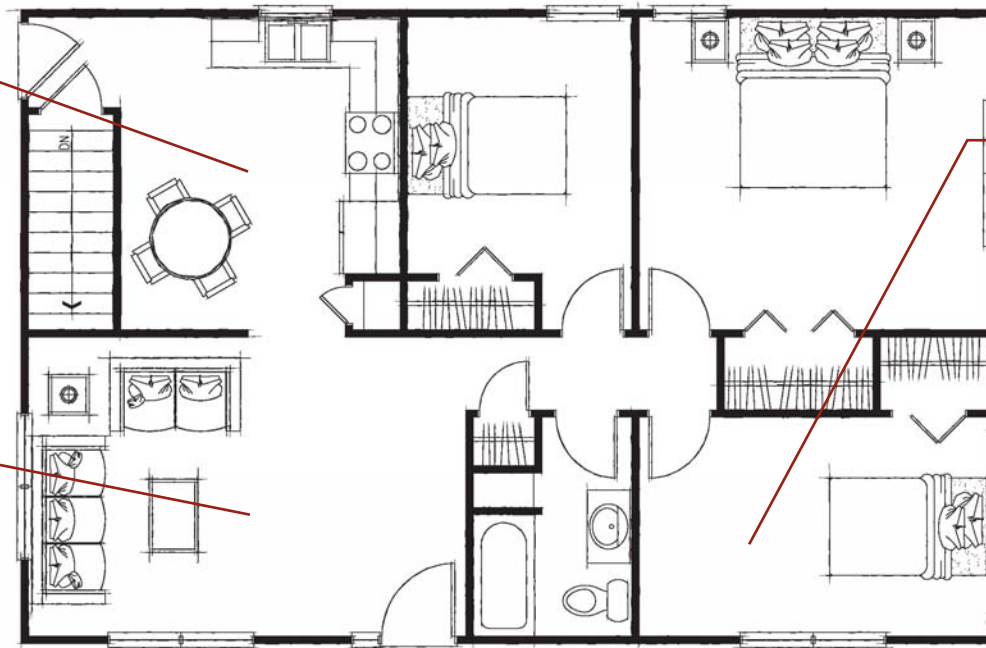
Introduction

Original Floor Plan

Kitchen and dining are together and open to the living room.

It would not be uncommon to see a 1-stall garage here.

In some Ranches, the kitchen and dining are to the front of the house and the living room is toward the back.



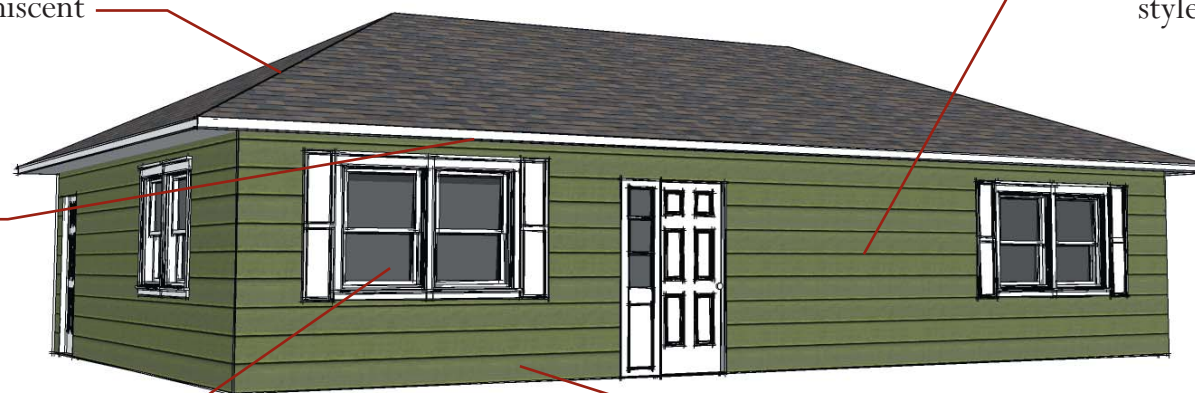
The plan is designed for single-floor living, with bedrooms at one end and living spaces at the other.

Original Elevation

The low hip roof is reminiscent of the Prairie Style.

The building is long and low; horizontal lines emphasize the free American spirit.

A picture window looks out on the street.



There are almost no details to identify the style or enrich the façade.

The plain walls and roof are unbroken by bump outs or dormers.

What updates are usually needed in a Ranch?

By today's standards, Ranches look very plain. They lack the interesting details typical of other styles, making it difficult to create a place that looks like "home". Fortunately, with careful research you may be able to infuse your Ranch with details from a closely-related style (like the Prairie Style) that is more visually rich. See the inset section on the Prairie Style for ideas.

Ranches usually take up the full allowable width of the lot, leaving no room for expansion to either side. When more space is needed and preserving the front and back yard is a priority, the only direction for expansion is up! In the next few pages, we will show an example of what a 2nd story "pop top" addition might look like. (Be aware that adding a 2nd story is expensive and difficult – and in some cases impossible.)

Also demonstrated are some less expensive ways to gain space and spruce up the appearance of your Ranch. One way to liven up a flat exterior is to add a porch, covered patio or 4-season room. Small bump outs and bay windows are another good way to gain space for fewer dollars. Most older houses could use a kitchen or bath makeover, and many can be made more livable by moving a few interior walls around. We will show examples of both.

A reminder for those with houses of other styles: these ideas can often be adapted to your house so long as your style's "rules" are followed. Watch for ways that will make your home work better – you might even think of something we didn't! In the next several pages, we will show:

- A 2nd story "pop top" addition, including a master suite and front porch
- Interior renovations

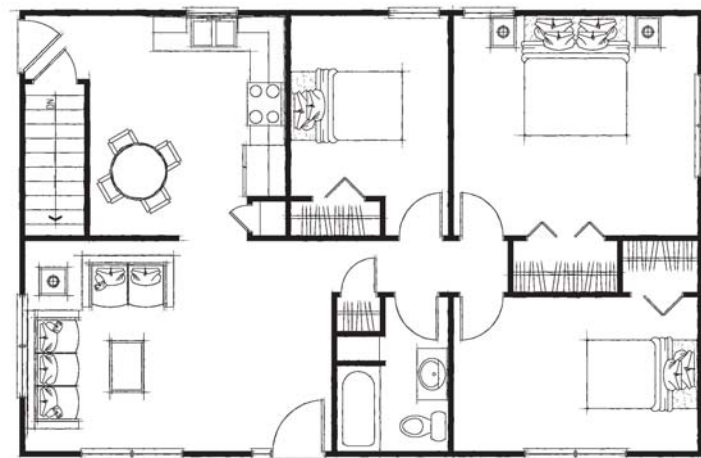
The Ranch

“Pop Top” Addition

What do you do when you can't build out? How about building up! Adding a 2nd story isn't for the faint of heart, but sometimes building up can be the best choice.* Here, we imagined that the homeowners wanted a new master suite addition.

To access the addition, stairs are added above the basement stairs. Going up, we turn right to see built-in bookshelves lining the balcony. The balcony opens to a generous sitting space and bedroom, which is flooded with light on two sides. Around the corner are his-and-hers closets flanking the entry to a spacious master bathroom. Separated from the hubbub below, the new 2nd story master suite truly becomes a tranquil, light-filled “away space”.

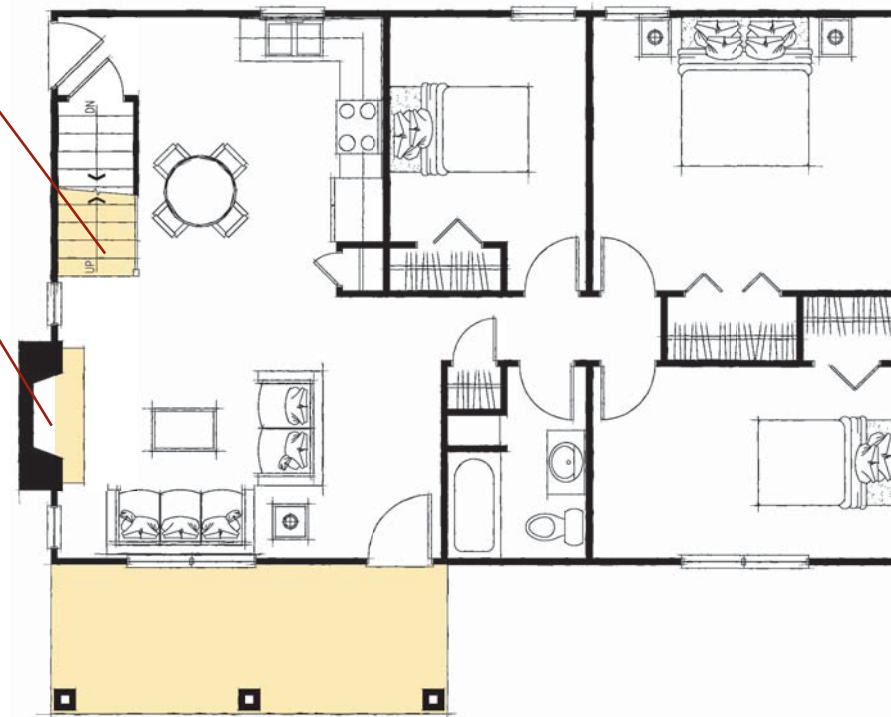
*The foundations of some older homes can't support a second story. Be sure to check before you pay for plans or materials.



Original Floor Plan

Stairs to the 2nd story are added over the basement stairs.

Friends and family can gather around the new fireplace.

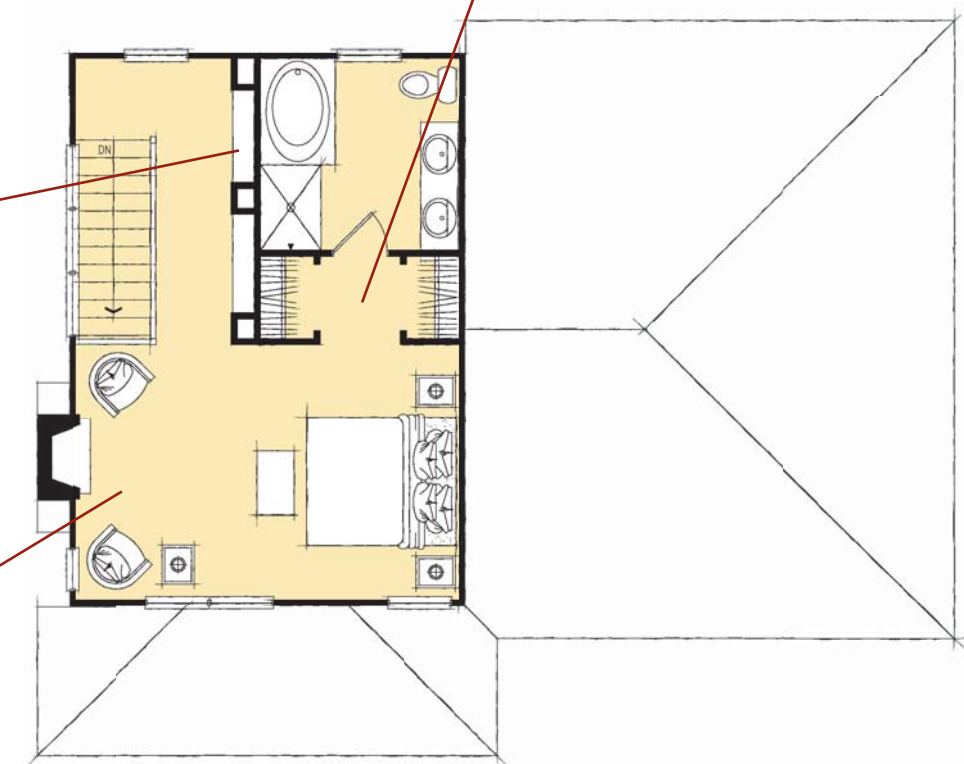


Revised 1st Floor Plan

The closets help create a more private “transitional space” leading to the bathroom.

Lining the balcony with books saves space while adding visual interest.

Be sure to leave adequate room for furniture.



Revised 2nd Floor Plan

The Ranch

“Pop Top” Addition

Ranches are always just one story tall, so they have no visual “vocabulary” for a 2nd story. What are we to do? How about a transformation into the more flexible Prairie Style?

Here the tall addition is asymmetrically balanced by a new front porch, which also helps to relieve the boring flatness of the façade. Prairie Style details like the “waistband” below the 2nd story windows make the house look more interesting. The waistband also helps to break up the visual “weight” of the bulky addition. Splurging on a few carefully placed details like art glass will add another dimension of beauty to your addition.



Plain old “pop top”.



“Waistband” divides the mass.

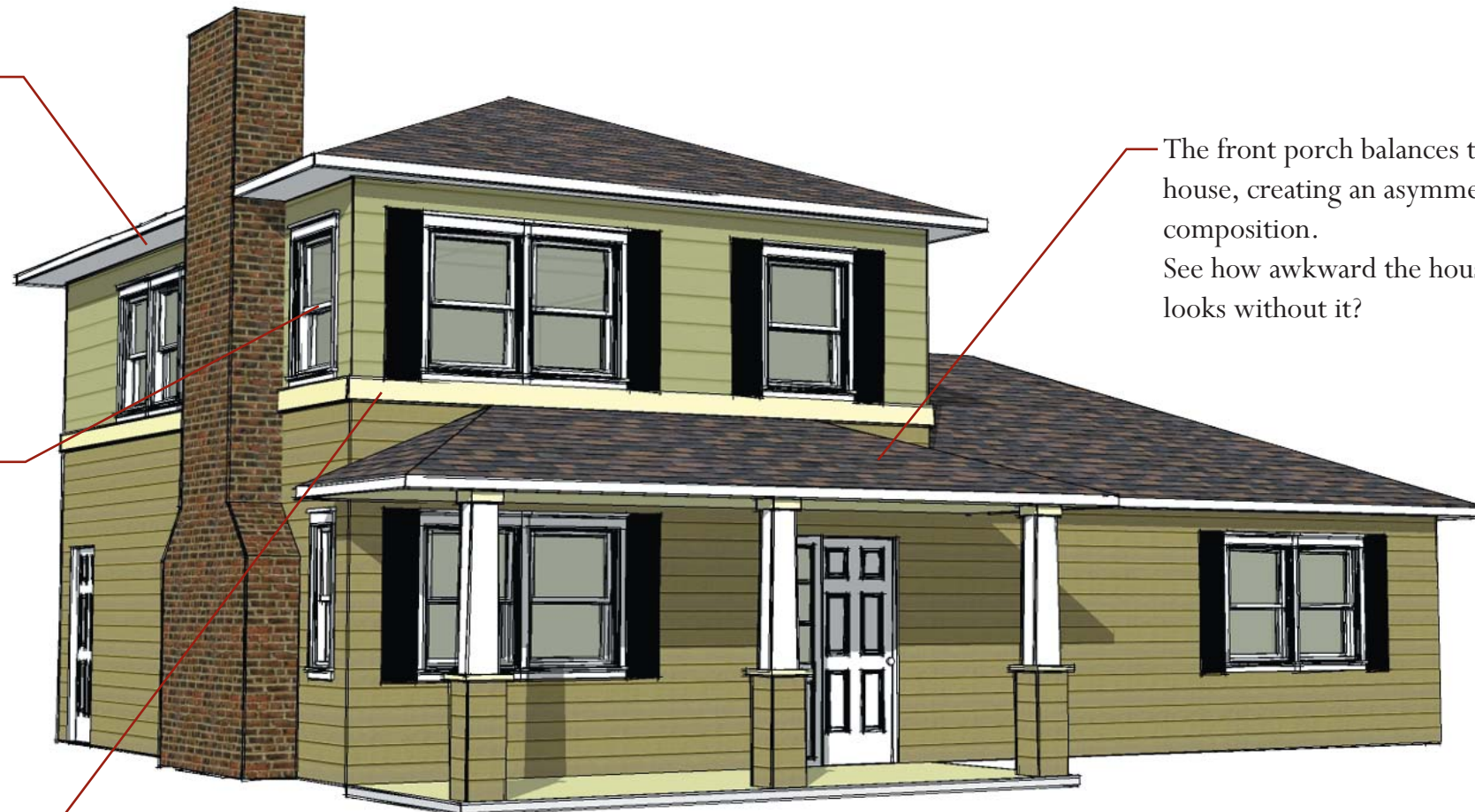


The porch gives it depth and balance.

Wide roof eaves create an interesting shadow line and protect windows from full sun.

Windows on 2 sides of the room create more even, glare-free light throughout the day.

A trim “waistband” helps break up the mass of the 2nd story addition.



The front porch balances the house, creating an asymmetrical composition. See how awkward the house looks without it?



Original Elevation

Well-placed art glass windows can give your house visual impact inside and out.



Revised Elevations

The Ranch

Interior Renovations

Over time, a household's needs change, often leaving less-used spaces in our home. Sometimes we want more space and light or to correct a shortcoming in our house without breaking the budget. For these situations, an interior renovation may be in order. Here are some examples of remodels that stay within the original footprint of the house:

- A rear entry closet with window seat bumpout.
- A dramatic kitchen/dining remodel.
- A simple rearranging of closets.
- A bedroom bumpout for light and space.
- A new master bathroom and walk-in closet.

The back door gets the most daily traffic. It needs a coat closet.

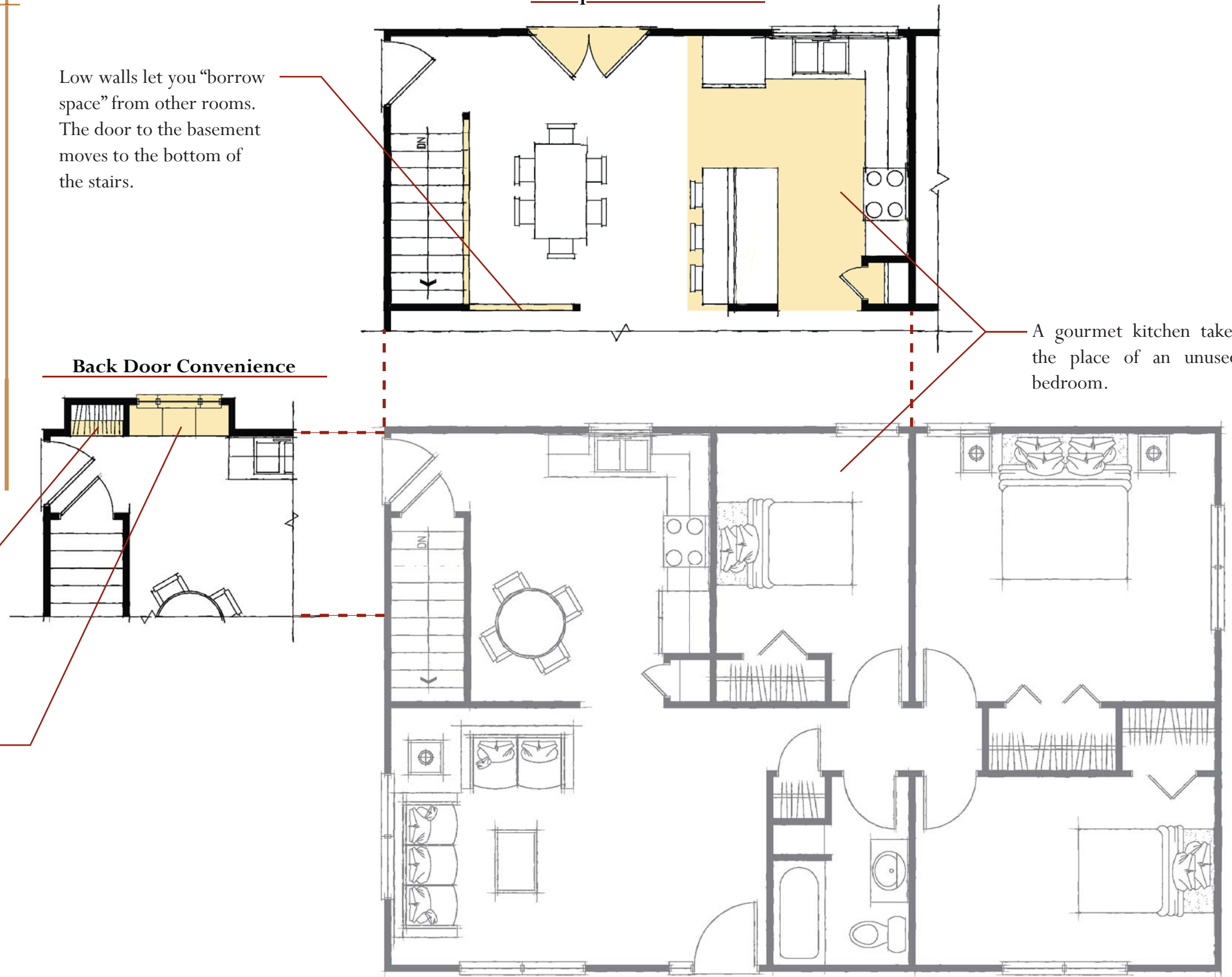
The window seat makes an out-of-the-way place to linger while dinner is cooking.

Low walls let you "borrow space" from other rooms. The door to the basement moves to the bottom of the stairs.

Expanded Kitchen

Back Door Convenience

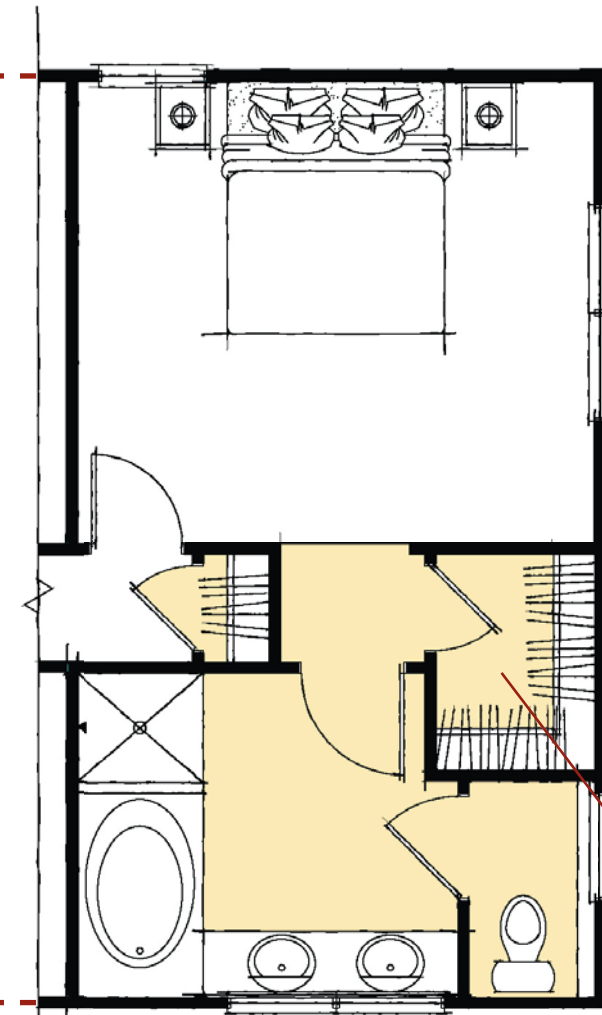
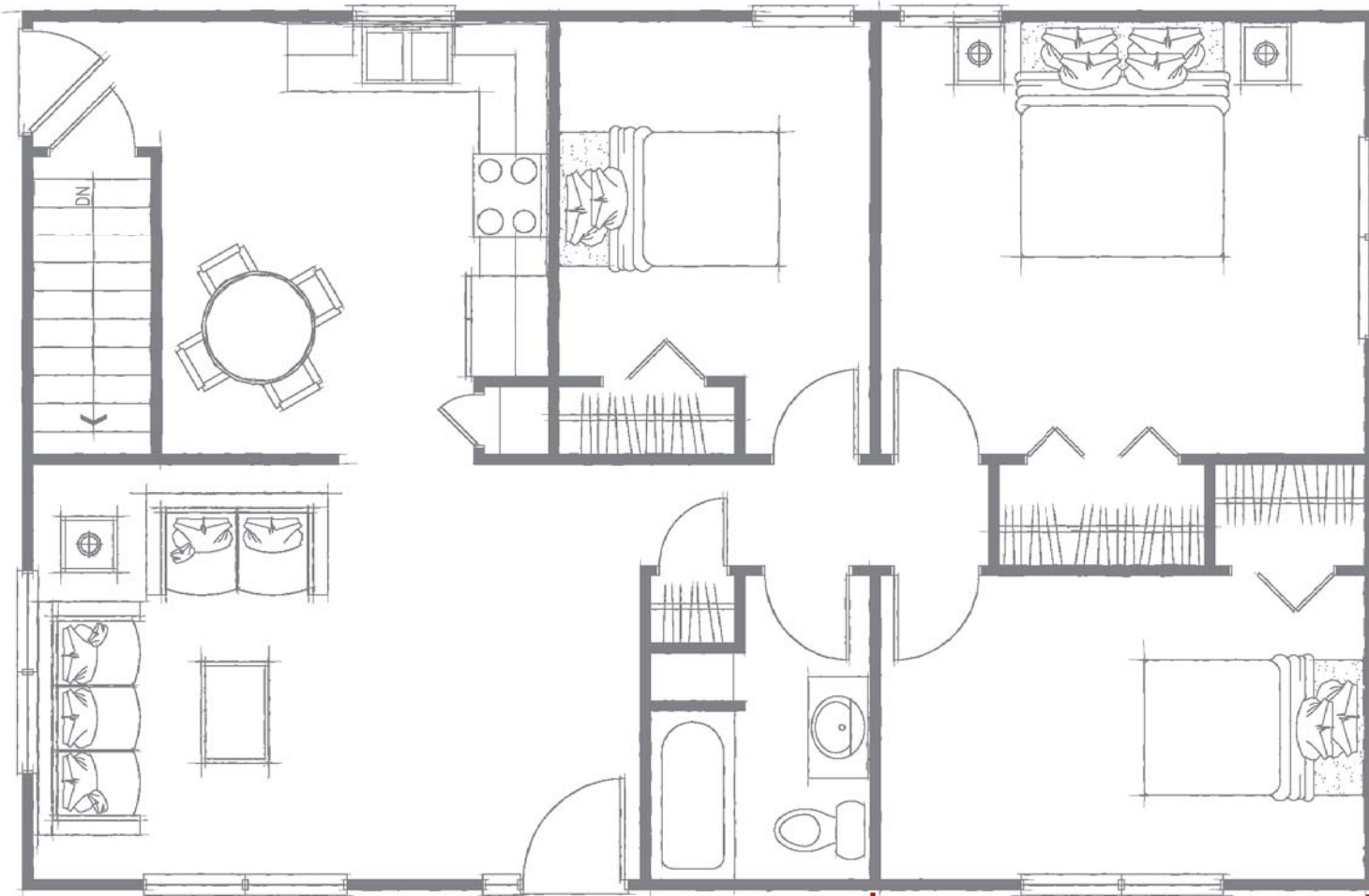
A gourmet kitchen takes the place of an unused bedroom.



The Ranch

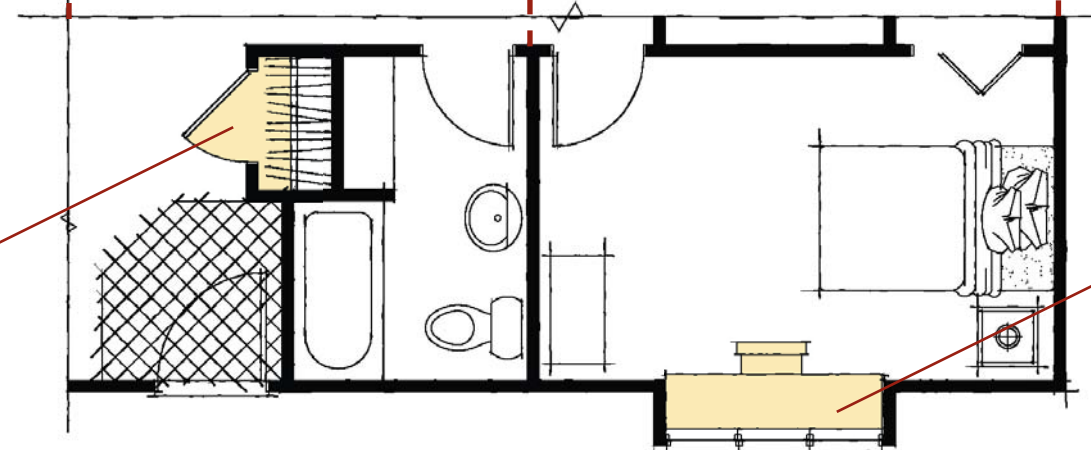
Interior Renovations

Original Floor Plan



Master Suite

A walk-in closet adjoins the spacious new bathroom.



Entry closets should face the space they serve. Linen cupboards can be as shallow as 12 inches.

A bumpout makes space for a desk and enlivens the exterior

Entry Closet

Bedrom Bumpout

The Split-Level

Introduction

History and Features of the Split-Level

The split-level became popular in the 1950s as a multi-story alternative to the one-story Ranch. Its distinctive shape was derived from a popular theory that the home should be divided into three separate zones: noisy living & service areas on the bottom level, quiet living areas on the main floor and sleeping areas above the “noisy” floor. Each floor was connected by a half-flight of stairs.

This new arrangement was an attempt to reorganize the home to accommodate the now-ubiquitous television and the automobile. The family room became the place for noisy TV-watching. Tucking the garage under the bedroom wing was one way to give living spaces the “higher ground” while also saving yard space.

Split-levels, like the Ranch, tend to have wide, low roofs and long horizontal lines. But they also tend more often to have generic Colonial details like window shutters, traditional front porches, gable roofs and sash windows. The exterior is often faced with brick or siding or both. Large picture windows are popular, and there is often a chimney – sometimes in brick, sometimes sided like the house – running from the living room fireplace. Interiors are more generic than in pre-WWII designs, but closets are larger, and there are sometimes two or more bathrooms.



The Split-Level

Introduction

Original Floor Plan



Original Elevation



What updates are usually needed in a Split-Level?

The split-level, like the Ranch, looks plain and dated to modern eyes. Generic exterior details that looked good in 1960 no longer have the same appeal. Many homeowners recognize this and have done their own tasteful remodels. Search your neighborhood for good examples. Split-level remodels tend to update windows, trim and siding, add front or back porches, landscape for more visual interest and create a more upscale interior.

Window technology has advanced dramatically in the past 15 years. Double or even triple-pane windows reduce heat loss in the winter, and special coatings can block summer heat and help the glass clean itself! These expensive replacement windows pay for themselves over time in energy savings.

One of the most cost-effective ways to dress up a plain exterior is to add a porch, deck or sunroom where appropriate. Split-levels tend to present a tall, plain face to the street, and they don't always open to the backyard very well, either. Sometimes a new porch is the solution, enriching the home's appearance and connecting the indoors and outdoors.

The interior layout of the split-level still works well for many people today. All that may be needed is an update of materials, and perhaps a more open connection between the kitchen and living room. New kitchen cabinets, new paint or new flooring can do a lot to make your older house seem new.

Additions and updates covered in the next few pages:

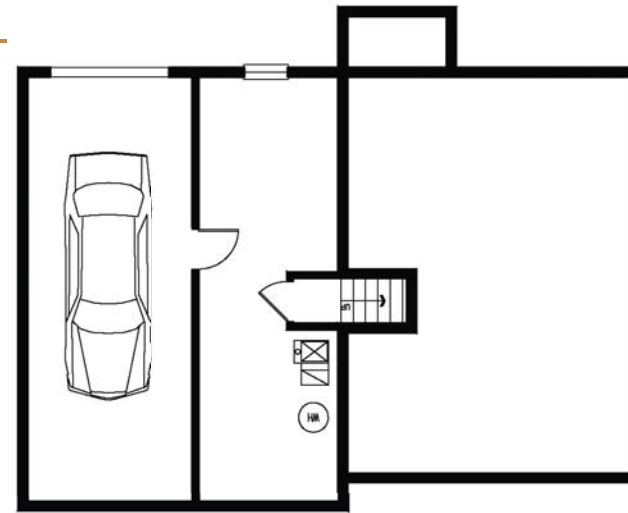
- Second story master suite, with tandem garage beneath and a new home office.
- Handicapped-accessible main floor suite.

The Split-Level

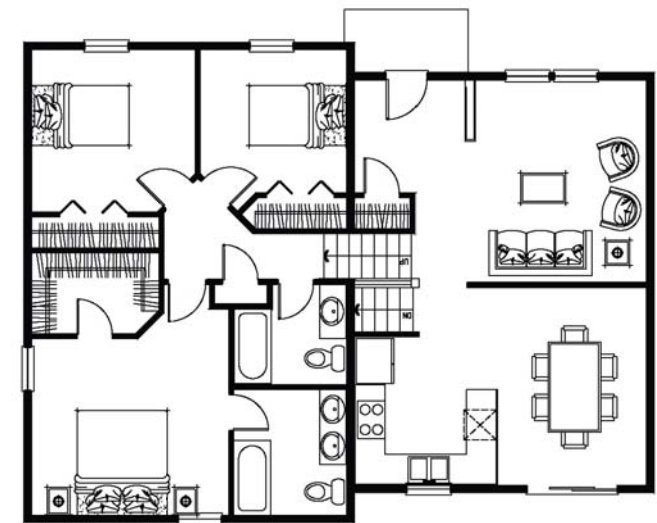
Master Suite, Home Office & Tandem Garage

On the outside, this appears to be a very conservative addition. But extending the rear just a few feet allowed for a lot of changes inside. Here, we created room for a second car, added a home office, created a sitting room adjoining the master bedroom and expanded the master bathroom to luxurious proportions.

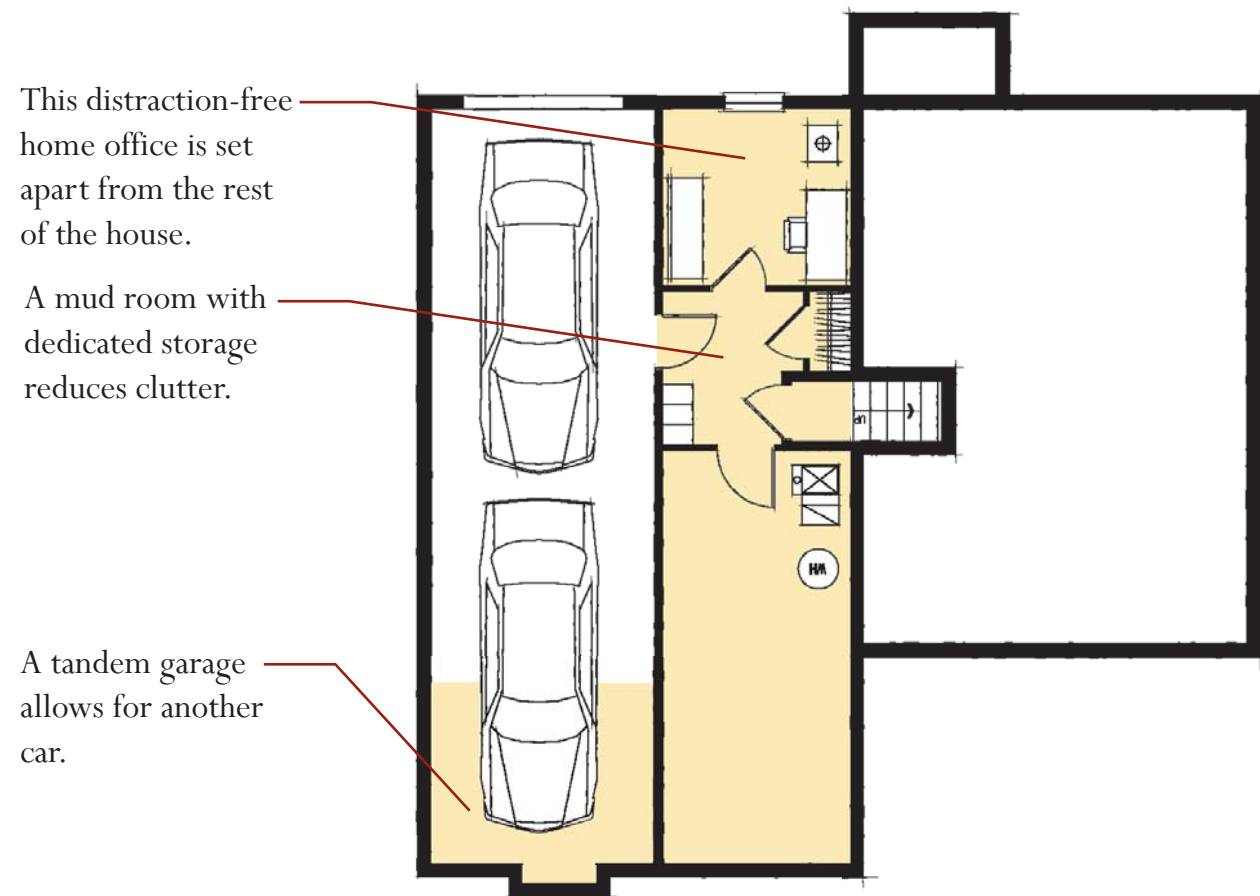
Exterior changes were minor, but they reinforce the character of the house. A new color (whew!) and trim around the windows give the house a more generous, classic look. The new fireplace makes for a cozy sitting room inside and anchors the outside of the addition. And the patio now looks like less of an afterthought because it is more sheltered by the extended rear wing.



Original Lower Level



Original Main Level

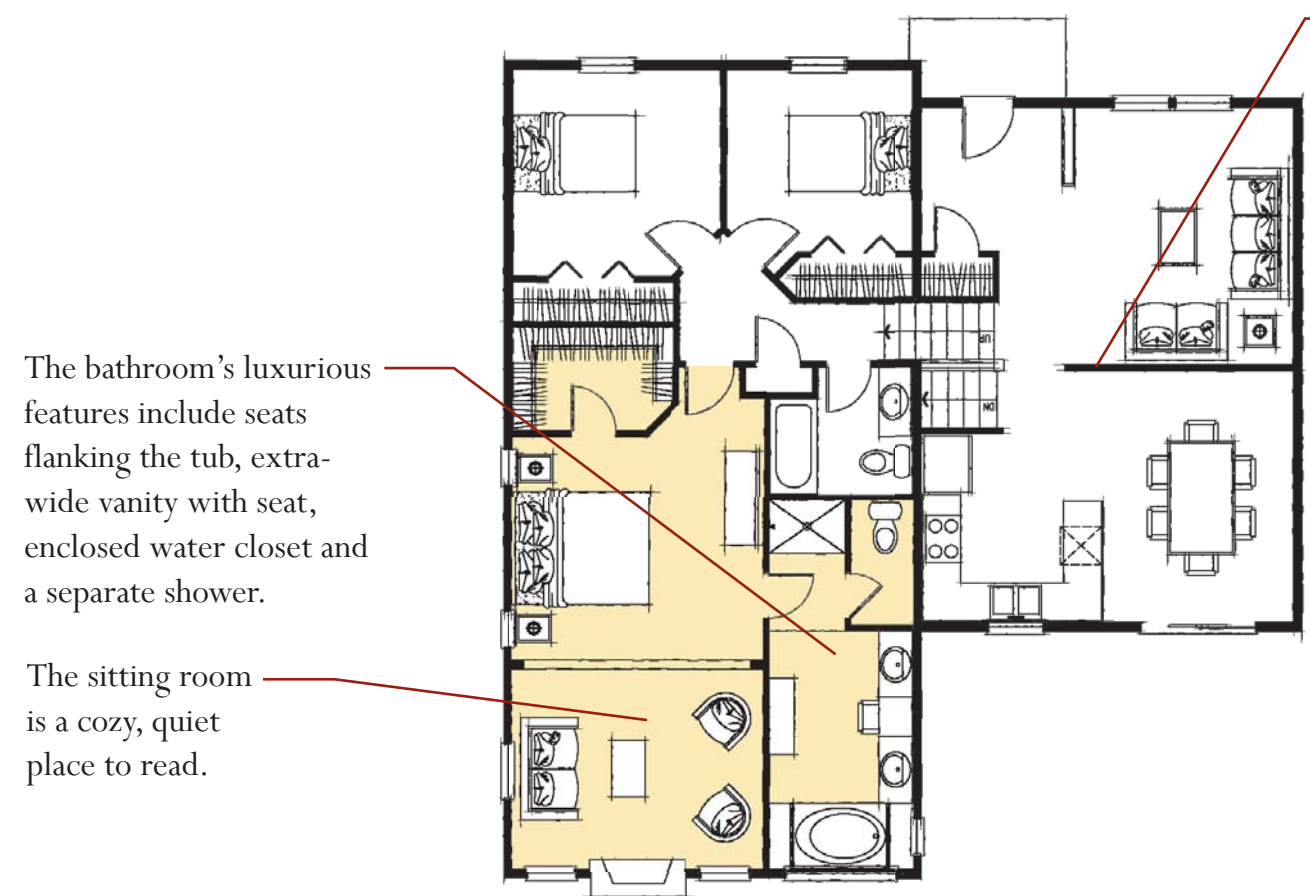


This distraction-free home office is set apart from the rest of the house.

A mud room with dedicated storage reduces clutter.

A tandem garage allows for another car.

Revised Lower Level



The bathroom's luxurious features include seats flanking the tub, extra-wide vanity with seat, enclosed water closet and a separate shower.

The sitting room is a cozy, quiet place to read.

This wall could be modified to "open up" the connection between the living room and the kitchen.

Revised Main Level

The Split-Level

Master Suite, Home Office & Tandem Garage

A successful home office may need to be no more than a desk, chair and lamp in the living room. But often it is wise to dedicate a small room apart from living or sleeping areas to reduce interruptions and to reinforce one's sense of "going to work" for a few hours. Here, we borrowed space from the utility area and created a distinct mud room, as well. The tandem garage is a unique solution for tight lots, though it does necessitate some car-shuffling.

This ultimate master suite is for those who like to "get away from it all" right at home. The sitting room is a great place to snuggle by the fire or for interruption-free reading. It is also a good place to display valuables you don't want damaged by the kids. And the bathroom is just plain luxurious! This addition is proof that you can have upscale perks without buying a \$300,000 house.



Original Elevation

A fireplace adds texture and variety, visually anchoring the addition.

The addition stays close to the original profile, ensuring a good fit within the neighborhood.

New trim around the windows brings out the home's good features.

The patio is sheltered by the lengthened addition.

Thoughtful landscaping makes the house less like a fortress.



Revised Elevation

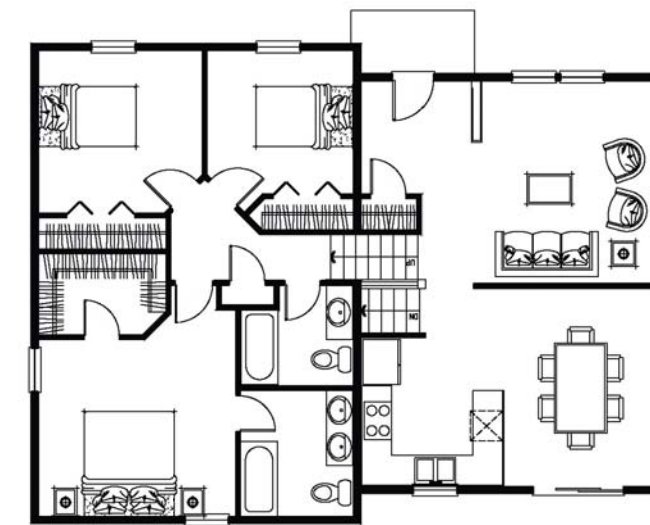
The Split-Level

Handicapped-Accessible Main Floor Suite

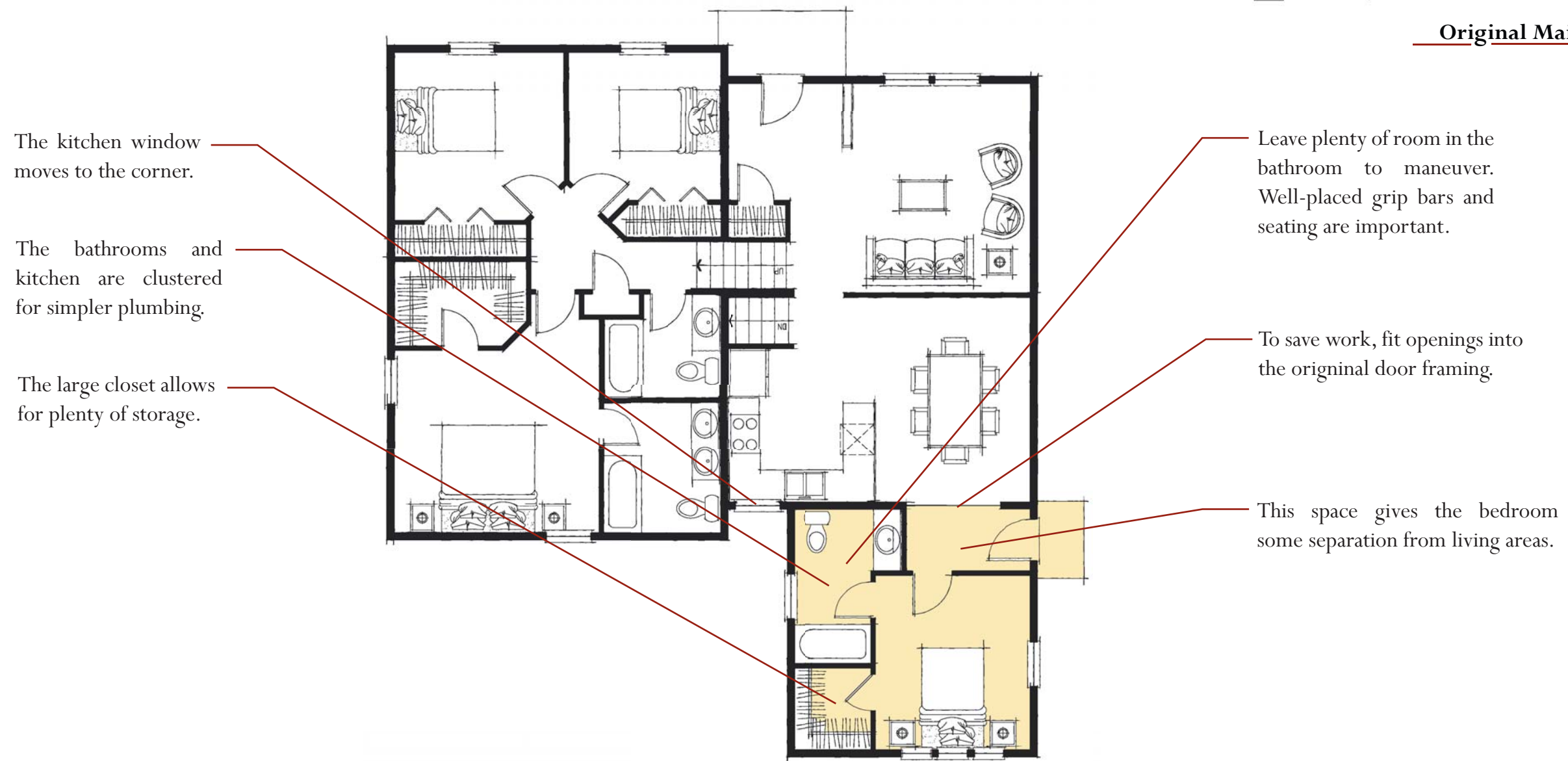
This is a main level bedroom suite addition for someone who is not fully wheelchair-confined but has limited mobility. It allows them to participate in activities in the living areas without having to go up and down stairs.

Here, the rear entry becomes a side entrance, creating a little vestibule area that gives the bedroom some privacy. The path from bed to closet and bathroom is short. The bathroom allows abundant room to maneuver, which is important whether a person needs extra seating, assistance or is wheelchair-bound. Be sure to consider locations for grip bars.

High windows over the bed bring in plenty of light while preserving privacy. Storage is abundant – a thoughtful consideration for those who are transitioning from an independent living situation and want to retain prized possessions.



Original Main Level



The Split-Level

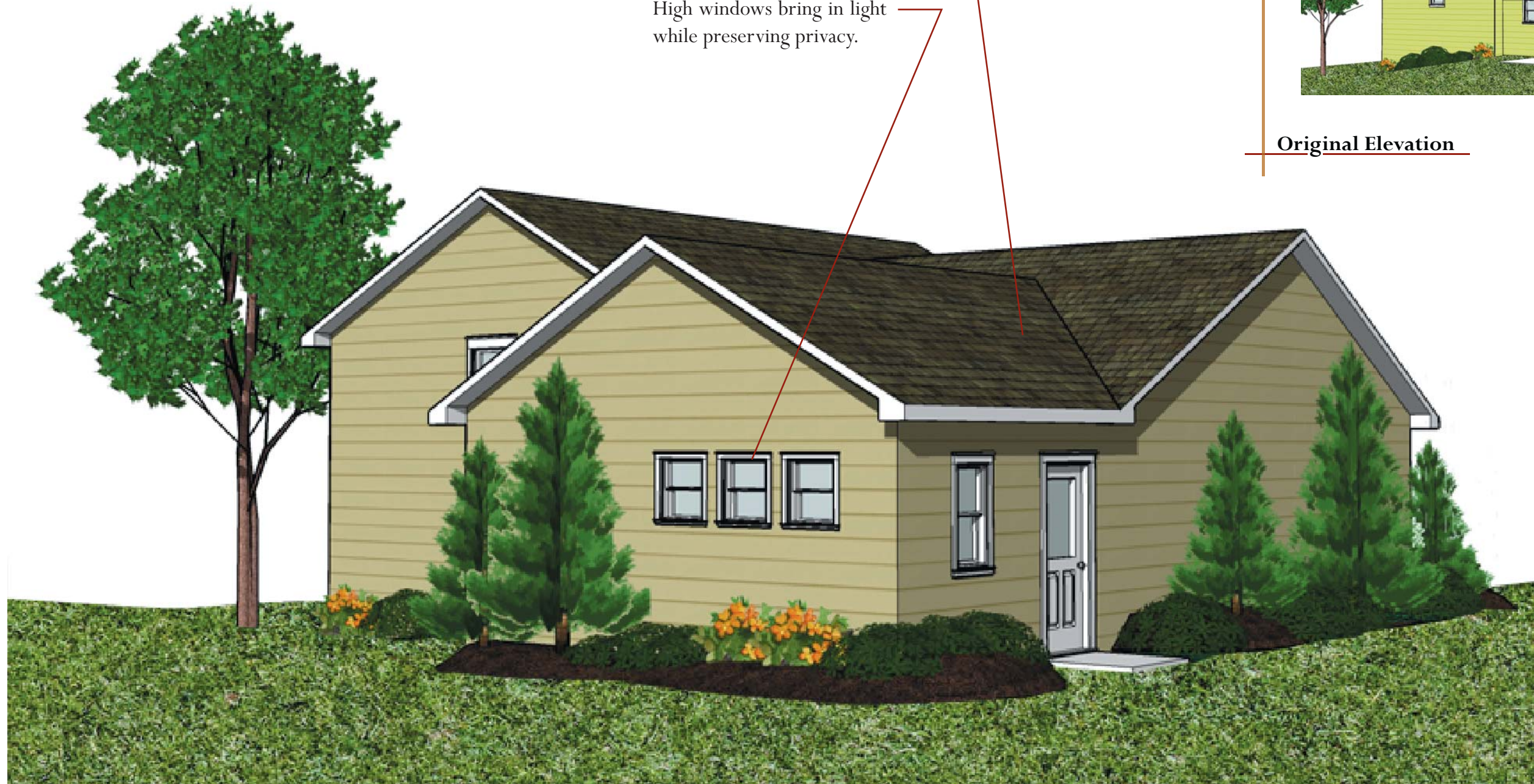
Handicapped-Accessible Main Floor Suite

A gable roof over the addition mimics the original form.

High windows bring in light while preserving privacy.

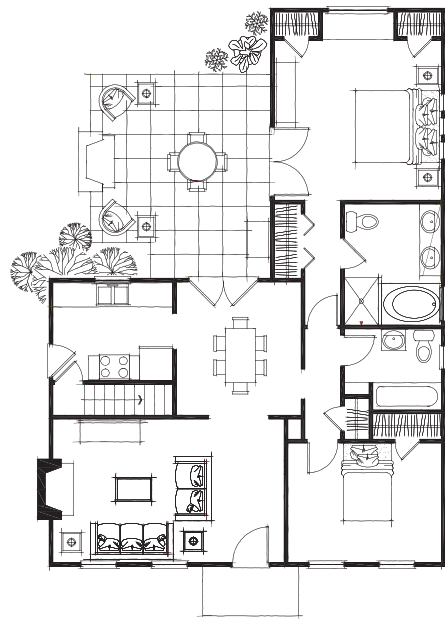


Original Elevation



DRAWING BOARD

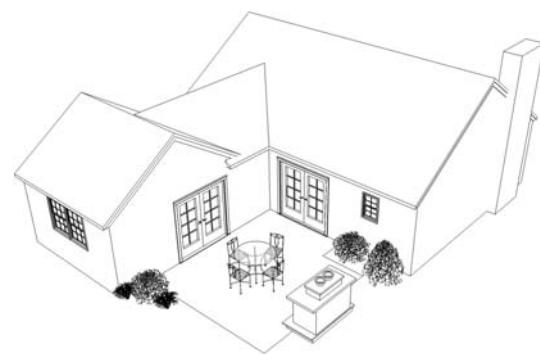
Sketch some ideas for your renovation!



Floor Plan



Elevation



Perspective

Working from your list of desired spaces, start by sketching floor plans and elevations to scale. Create several versions until you are satisfied with the layout and exterior. Refer often to your notes on style. Then draw a more accurate version using specific dimensions. A qualified builder can help you with construction drawings.

(If designing your own addition turns out to be too difficult, call a residential architect whose work you like. Share your notes and images.)

You may find that you don't know the size of a shower stall or the depth of a garage. Whatever it is, don't just guess the dimensions – grab a tape measure and measure one! Here are some standard dimensions:

Exterior walls are typically 3½" or 5½" and interior walls are 3½".

Minimum hallway width is 36".

Closets are typically 25" deep.

Maximum stair riser: 7¾"

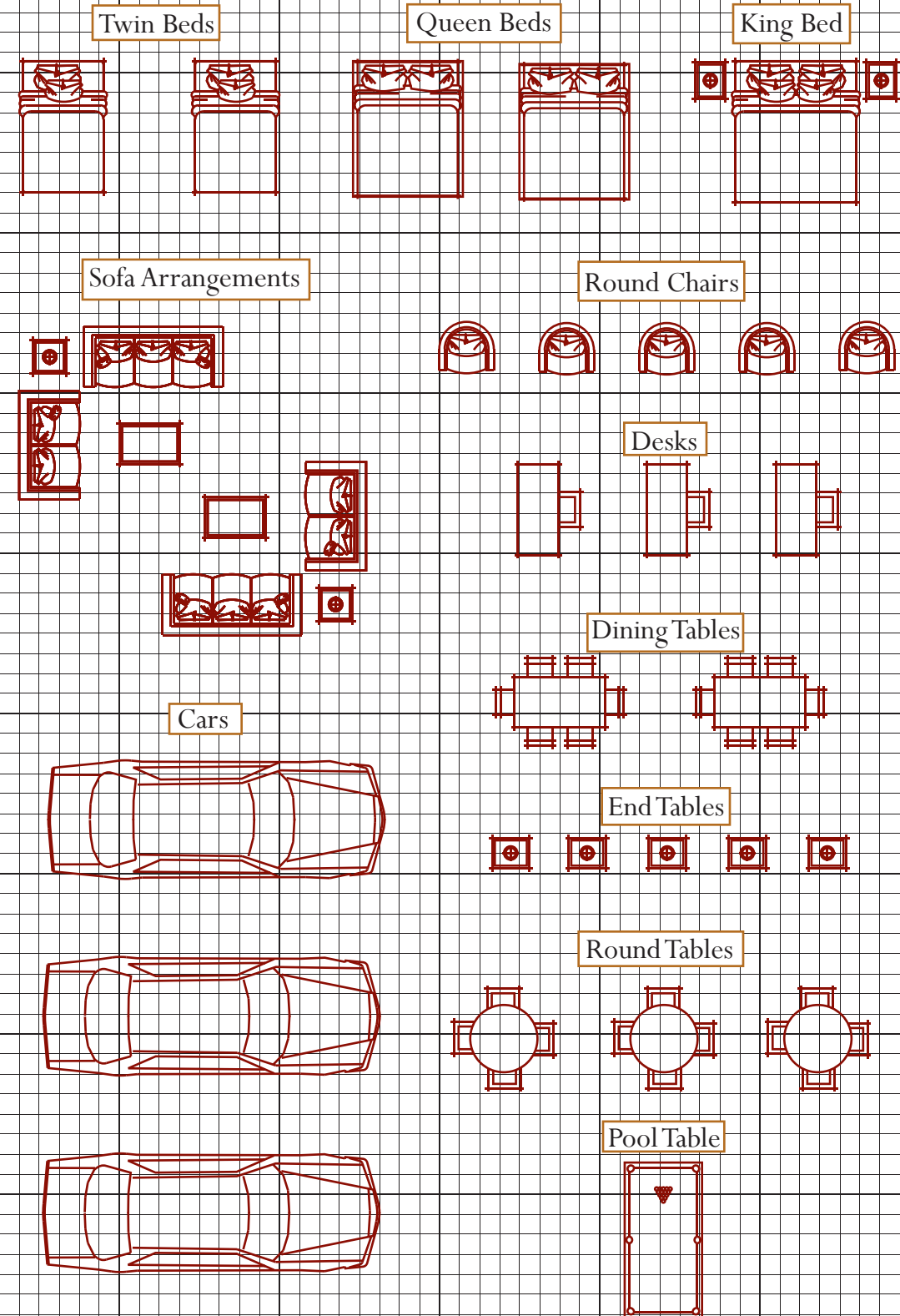
Minimum stair tread: 10"

Minimum headroom: 6'-8'

Kitchen and vanity cabinets come in increments of 3".

Rooms are measured from inside wall to inside wall, while the exterior is measured from outside corner to outside corner.

1/8" SCALE FURNITURE



DETACHABLE ARCHITECT'S SCALE 1/8" = 1'-0"

Other Resources

Publications

Accessibility

Residential Remodeling and Universal Design - Making Homes More Comfortable and Accessible, by U.S. Department of Housing and Urban Development

Colors

Exterior Style, by Benjamin Moore Paints

Design & Style Resources

A Field Guide to American Houses, by Virginia & Lee McAlester

A Pattern Language, by Christopher Alexander

American Shelter, by Lester Walker

Caring For Your Historic Home, by Heritage Preservation & The National Park Service

The Not So Big House & Home By Design: Transforming Your House Into Home, by Sarah Susanka

Residential Evaluation & Retrofit, by John A. Watson

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Sources

City of West Des Moines

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- Image of Valley Junction, circa 1908

Additional copies of this book may be obtained from:

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