Cape Cods & Ramblers

A REMODELING PLANBOOK FOR POST-WWII HOUSES

Blaine
Brooklyn Park
Columbia Heights
Coon Rapids
Crystal
Fridley
Golden Valley
Hopkins
Mounds View
New Brighton
New Hope
Robbinsdale
Richfield
Roseville
St. Louis Park

by
Robert Gerloff, AIA
Kristi Johnson
Peter J. Musty

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ACKNOWLEDGEMENTS

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THE POST-WWII HOUSING BOOM

This new Roseville subdivision near Hamline on Belmount was photographed in April 1952. Tiny saplings in vast expanses of green lawn were a suburban symbol in the '50s and '60s, but today's mature suburban forest creates an entirely different atmosphere.

It was the beginning of the future.

World War II was over, and the Great Depression was fading to a distant memory. A nation of servicemen were coming back to wives and children, or to marry and start new families. After decades of making do and doing without, America was ready to live again. It was the start of the Baby Boom and the housing boom. In 1955 the U.S. population doubled. In 1956 the Federal Highway Act added 41,000 miles of freeway to link every major city. In 1957 the Federal Home Administration financed 4.5 million suburban homes.

The G.I. Bill of Rights allowed veterans to buy houses with no down payment, and guaranteed FHA mortgages for the full appraised value of the house. One hundred percent financing was so revolutionary that some in the country were afraid it smacked of socialism.

In 1952, an ad in the Sunday *Minneapolis Tribune* spotlighted "The Kingston," a 40-foot, 3-bedroom rambler at $12,500, with nothing down and $40.25 in closing costs. The monthly payment for principal and interest: $69.03.

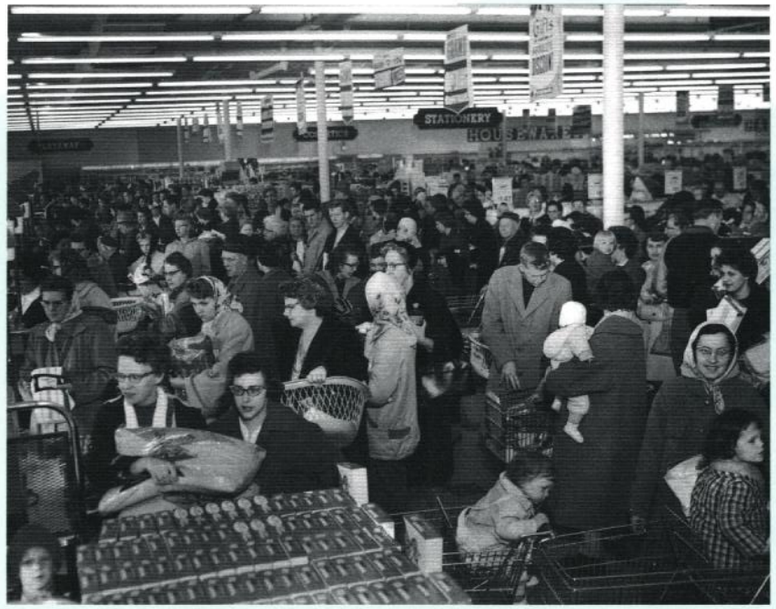
Non-veterans could also use FHA financing. The Kingston could be theirs for $130 down. This rambler, along with "The Santa Monica" and "The Carlyle," came complete with a "Built-In GE Kitchen." Built-ins were considered part of the house, and thus eligible for financing on the mortgage. Some builders began to include a real lure in their pitches–a built-in television set.

Homeownership for all Americans became the ideal. By 1956 *House Beautiful* could report that 60 percent of American families owned their own homes.

This was the decade when "first-tier" suburbs such as Blaine, Brooklyn Park, Columbia Heights, Coon Rapids, Crystal, Fridley, Golden Valley, Hopkins, Mounds View, New Hope, Robbinsdale, Richfield, Roseville and St. Louis Park, took shape. A decade that saw the St. Louis Park Riding Academy and the Woodlake Dairy in Richfield give way to rows of new ramblers.

It was the start of what we now call "The American Dream." Not only were simple pine 2x4's finally available for construction, but the enormous industrial machine built to fight and win the war was being retooled to supply Americans with housing and consumer goods manufactured using the newest technology. There were electric ranges, refrigerators, freezers, mixers, and dishwashers: Gadgets galore.

"We have a machine-based, gadget-based freedom," wrote *House Beautiful*'s editorial director, Joseph Barry, in 1956. "A gadget does not eliminate work; it makes work more pleasurable. In the home, as in the new factories, whatever is dull, exhausting, repetitive, and mindless, whatever, in other words, can best be done by a machine, is being done by a



Can't you just feel the pent-up shopping demand being released in this photo? It's the opening of the Spartan Discount Store in Roseville, in 1961. Americans had been doing without and making do for decades. Now the floodgates were opened on consumer goods, and families finally had the money to buy them.

machine, leaving human beings for human uses."

That factory system of mass production, now applied to the housing market, led to entire blocks of houses based on standardized plans going up in a matter of weeks. Economies of scale and new, prefabricated materials created houses that were turned out—and marketed—much like new cars.

As *House Beautiful* put it in 1956, "Just like the automobile, the house has become a much better product by coming on the mass market. Builder houses are probably more livable, convenient, thought-through than individually built, non-architect designed houses, average by average."

Builders were still busy, but by now they at least took weekends off. After the war, the 40-hour workweek became the norm. In addition, union contracts provided paid vacations, and set the standard for the business world.

It was a transition to leisure time, and to a housing type that epitomized leisure: the rambler.

The first houses built after the war were likely to be story-and-a-half Cape Cods or other Colonial Revival types left over from the more nostalgic 1930s. Theirs were practical plans, with expansion spaces and basements that could be finished later–the original Levittown houses. But in the early 1950s those housing styles were suddenly dropped in favor of a new building style straight from California, the land of leisure.

The suburban home, with its large backyard, perhaps with new sliding glass doors leading to a patio with a barbecue grill, invited relaxation. The problem was, America hadn't relaxed for some time. People needed instruction.

"How to Have Fun in Your Backyard" (1952) was a typical instructional piece provided by the *Minneapolis Tribune*. This Sunday magazine article explained how it was done.

"The backyard has become–and apparently still is in the process of becoming–a play place for the entire family. It isn't just a haven for the kid's sandbox and swings; it is an outdoor kitchen for Dad, a badminton court for the family, a garden and picnic site, even a swimming hole. In short, your backyard is in many ways your private little park, offering a recreational outlet for all kinds of activities."

The story also offered lots of tips for Dad, who now was in charge of the realm of Outdoor Cooking.

"Outdoor Cooking is Man's Work" the magazine proclaimed, and Dad out on the patio grilling steaks became the national symbol of leisure.

Suburban backyards were generally much larger than city yards–no city alleys or garages in back–which allowed for more play area, and provided extra space for future expansions. These yards were the start of what we now call "cocooning."

"Today's crowded streets and fast-moving traffic make it less desirable to leave home, unless business requires it, or some long vacation trip lures us. For evening or weekend recreation we are happy to stay put," wrote *House Beautiful* in 1956. "So we have provided ourselves at home with many of the pleasures formerly provided by the community."

Those photos of Dad out by the barbecue in 1955 do tend to look a little stark, however. The new suburbs were largely carved out of farmland, and developers added the sapling maples, ashes, and fruit trees planted on each lot.

But today, those now-mature trees have created a leafy canopy that make our first-tier suburbs look positively forested. In contrast, the Midwestern city's reliance on the American elm created large gaps in once sheltered neighborhoods. In a few decades, as the first-tier suburbs matured, and builders built further and further out, they became something else: established, affordable neighborhoods that still provide that feeling of "the good life."

These homes, once marketed in the real estate want-ads as "futuristic!" "RE -E-E-E-E-LY Different," and "VERY DIFFERENT" (this is Minnesota, after all) are highly sought-after properties today.

"Ramblers are hot," says Danese Anderson of Great Minneapolis Real Estate. "Ramblers are easier to contemporize than any other housing type. There is just so much flexibility, even with adding additions. To buy a rambler today in a first-tier suburb, you really have to have your ear to the ground."

The Ray and Wanda Johnson family enjoy a backyard picnic in Richfield in 1960. Suburban backyards are much larger than their urban counterparts, and backyard recreation was a big part of post-war living. In 1956, the *Minneapolis Star* reported that during the summer 81 percent of all suburban families were eating some meals outdoors.

Our "futuristic" first-tier suburbs, along with the cities of Minneapolis and St. Paul, are set to become the hottest market of the new millennium, says real estate futurist Glenn Dorfman, chief operating officer of the Minnesota Association of Realtors.

"Those ramblers are going to be absolutely premium houses," he says. "They're at the right place at the right time.

"Demographics will drive all the changes," he continues. "We have 80 million Baby Boomers and a movement out of the exurbs toward reurbanization. You will clearly see it by 2010. They want access to health care, public transportation. That doesn't exist in the exurbs and never will."

Dorfman says the worst bet in real estate today are enormous builder homes in the far-flung suburbs.

"There will be a glut of those high-value homes; there are nowhere nearly enough people for them," he says. "Size isn't a big deal. We have plenty of room in our 1,600-square-foot house. But we have a bunch of people building monsters, and that seems to be a Minnesota aberration. It is not occurring around the country.

"I tell people they will lose money on them if they build them now. It's the moderately priced home that is the high, high premium home today. We're seeing it happen right now. The house selling for $85,000 to $150,000 just doesn't stay on the market."

Dorfman says those currently looking to invest in a first-tier suburban home should first look at updating and maintaining the basics, such as the heating system, the insulation, and the roof. Then they can look at expanding their very adaptable homes.

"It's a smart move to lay out a plan to modify your house over a number of years," he says. "Investigate the cost of the project, don't try to do everything at once. First bump out the kitchen to add the dinette, then do a little more over time. Try financing with a home equity loan."

And keep handicapped accessibility in mind, when doing remodeling work, says Dorfman. If you're remodeling the bath, you can easily enlarge the door to make it wheelchair accessible. "It will only help with resale," he points out.

Those suburban Cape Cods and ramblers still fit the bill for the American Dream Home, says Realtor Anderson.

"We've seen a trend to bigger and bigger houses, further and further out," she says. "Once someone has experienced bigger, they're going to want smaller. They've 'achieved' that big house, and now they realize the expense, the maintenance, the amount of furniture required. They want to come back and scale back to a more manageable situation."

Anderson calls the city and its first-tier suburbs her "bread and butter."

"The neighborhoods are steady, there is pride of ownership in the homes, people are always improving upon what they buy," she says. "These houses really fit the bill, and you can expand them."

Still, it is remarkable that these houses, once billed as "futuristic," still fit our definition of modern, and that the neighborhoods they built should once again represent the future of homeownership.

That is why this planbook was created: To provide architect-designed expansion plans to fit the Cape Cod and the rambler. To allow a generation that was raised in these modern communities the opportunity to come back, and make them once again their dream homes.

HOW TO USE THIS BOOK

Thousands upon thousands

of nearly identical Cape Cods and Ramblers were built in the Twin Cities Metropolitan Area during the 1940s, '50s and '60s. Our goal in this book is to take three of the most common house types and show how you can update, improve and fine-tune your house to today's lifestyle in a manner consistent with the style and character of the existing house. Everyone can point to a bad "remuddling" in their neighborhood, a remodeling or addition that–like adding dormers to a rambler or a shed roof to a Cape Cod–destroys the integrity of the existing house. While these "updatings" seem practical at the time, in the long run they destroy a house's value, along with its curb appeal. Additions or remodelings that preserve and enhance the existing house's character provide much greater value for your investment in the long run. For more ideas, see the "Keep in Minds" at the end of the book.

How were the houses selected?

Spend a few hours driving around Twin Cities suburbs and you will see the same three houses over and over again. The story-and-a-half Cape Cod. The two-bedroom rambler with detached garage. The rambler with single-stall attached garage. We tried to find houses that were in fairly original condition and owned by people who were willing to put up with the intrusion of participating in this study.

What if my house is different?

While entire blocks of houses may look identical, in reality every house–including yours–is unique. We have tried to present the designs *as ideas* so you can apply them with minor modifications to your own unique house.

How were the additions selected?

For each house type we first interviewed the homeowners about what changes they wanted to see in this house, but we also talked to a panel of experts–a builder, a Realtor, and a mortgage banker–who commonly work with these types of projects and are familiar with the market conditions.

How can I find more information?

Information is available through your city that will help in preparing construction drawings within the requirements of the state building code. Following this process will help speed plan review and approval of a building permit. In addition, having complete plans will help you calculate materials costs, reduce the number of problems that arise due to incomplete plans, and in general make the project go more smoothly.

What do I need to pull a building permit?

Construction plans need to consist of the following: 1) Foundation and floor and roof plans, with framing size and direction, window sizes and room names shown. 2) A building section showing materials to be used. 3) A site plan with proposed setbacks indicated if the project includes an addition. 4) Elevations, if needed. Our hope for this book is that the ideas are laid out clearly enough to allow you to work directly with your builder to prepare the necessary drawings.

How are square footages calculated?

All square footages are calculated from outside wall to outside wall. Remodeled square footages are calculated from the inside to inside dimension of walls that remain. Plans, sections and elevations are all drawn to scale, either at 1/16" = 1'-0" or 1/8" = 1'-0" so you can use an ordinary ruler to calculate the rough dimensions of rooms and additions.

What do we do next?

Once you've moved from dreaming to action, pull out the resource pamphlets in the pocket inside the front cover and get to work! You or your contractor will need to contact your local building inspections department prior to starting your building projects to see if permits are required for the work you plan to do. Permits may be needed for electrical, heating, air-conditioning, plumbing, and building construction. Inspectors are a great resource for a variety of construction related questions. Also, by having your work inspected by trained professionals you can feel confident that the work was performed in a safe manner.

Meet the Schemels
CAPE COD

Mary and Jim Schemel call their 1953 St. Louis Park Cape Cod "solid."

They bought the white story-and-a-half home in 1993 for $79,000. Both grew up in St. Louis Park, and liked the area.

"Our mortgage payment is reasonable," says Mary. "We have friends paying three times what we are paying, and all they've got is location, location, location, and I guess prestige."

"And they haven't got as nice and as solid a house," says Jim. "We looked on it as a starter home, but we loved the hardwood floors and the solid construction. This house uses two-by-fours, not waferboard."

The Schemels' home is part of the Texa Tonka subdivision built in the 1950s, when much of St. Louis Park was constructed. The area also boasts what may well be the nation's first strip mall–the Texa Tonka Shopping Center. Both the development and the shopping center were built by one of Minnesota's first subdivision developers–Adolph Fine.

His motto: "A Fine Home."

Construction in St. Louis Park was "a spontaneous market response," says Fine's son, Jeff, whose first job was sweeping sawdust from the new homes for 15 cents an hour. "There was a housing boom after the war. He was thought of as some kind of hero for building affordable housing for returning G.I.'s."

Fine was also a hero to another group, one that had traditionally been red-lined in Minneapolis. "It was a new and open community," says his son. "My father sold to Jews with no hesitation, no problems. In Minneapolis, the only housing opportunities open to Jews at that time were limited to the north side."

St. Louis Park provided affordable, well-constructed homes to homeowners who might not have been able to access the new home market before.

"There is a long history of pride-of-ownership in those homes," says Fine. "They've always been affordable, made for working people who've maintained them and kept them up."

The Schemels' home sold for $10,450 brand new in 1952. In 1967 it sold for $16,700. The Schemels bought it for $79,000 in 1993, and homes just like it are selling for $90,000+ today.

"We like where we are, and the market is moving so quickly, we'd hesitate about putting it up for sale and finding something else in the area," says Jim. "I don't like new construction, and we don't want to lose the proximity. We're 20 minutes from everything. And we're pretty much like salmon–we swim upstream against the traffic."

This Texa Tonka Cape Cod has a lot going for it. A nice neighborhood, good schools, solid construction and a central location. The problem is the size. "I guess people were like gnomes back then," says Jim.

"I'd really like to see the upstairs opened up with a bath,

"IT'S IMPOSSIBLE TO ENTERTAIN IN A HOUSE THIS SIZE."

– Jim Schemel

bedroom, study, perhaps a baby room," says Mary.

The home, like hundreds of others like it, has no dining room and a small eat-in kitchen. It makes having dinner parties difficult.

"We want entertaining room," says Mary. "Not people all over the house with tray tables. And the kitchen is out. If we put all the leaves on the table and everyone sits down, nobody can move. One person has to do all the serving, and that's a drawback."

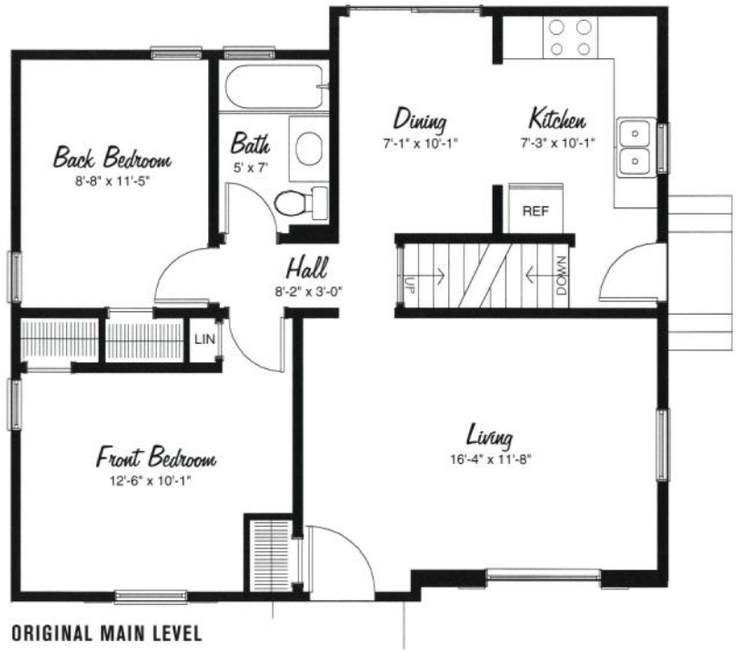
Jim says they'd also love a fireplace. "It's a great psychological boost when its 80 gazillion below, just to come home and have a fire," he says.

In addition to more entertaining room and a fireplace, they'd like a mudroom off the kitchen and more closet space. A gravity furnace in the basement takes up a great deal of potential living space, but they say they like its quiet, efficient heat.

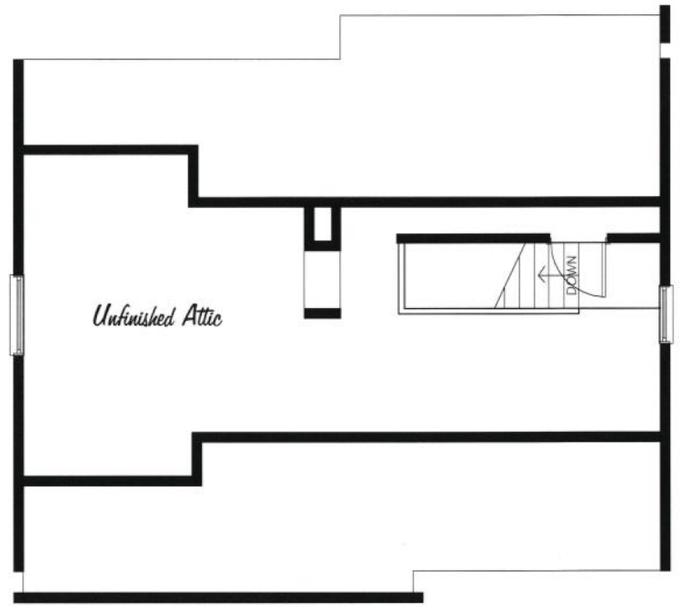
The house was built with a detached garage, and the Schemels don't want that changed. "I like a detached garage," says Jim. "You can look out all the windows, and it makes better use of the lot."

This Texa Tonka Cape Cod has been a good buy for its owners, but today it needs updating. High-quality construction and materials and routine maintenance have brought it up to the turn-of-the-new-century in excellent condition. Now it needs something more.

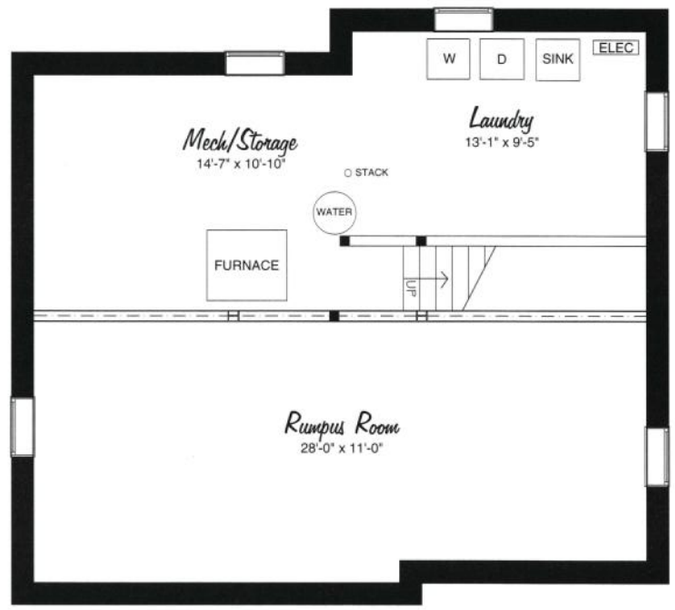
"We want to bring this house to its potential," says Jim. "We want to make it functional."



ORIGINAL MAIN LEVEL



ORIGINAL ATTIC LEVEL



ORIGINAL BASEMENT LEVEL

ORIGINAL FRONT ELEVATION

SQUARE FOOTAGE:

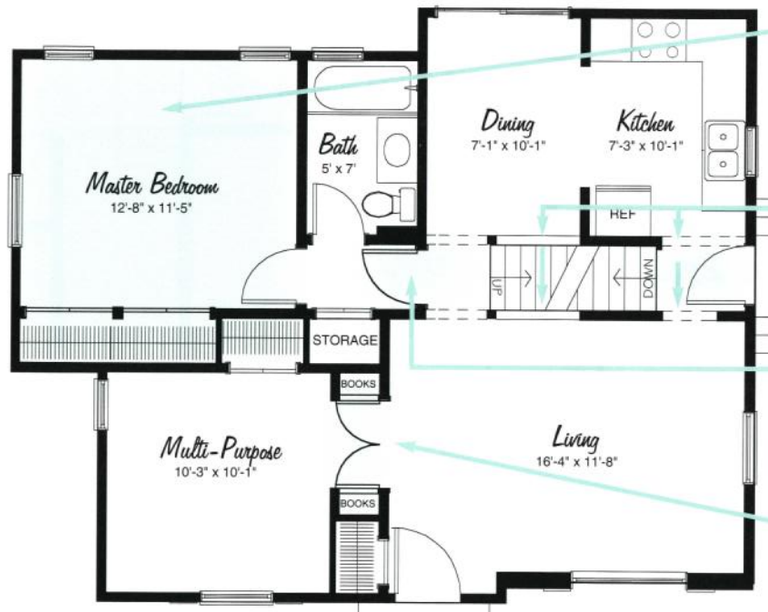
Attic Level	374 s.f.
Main Level	790 s.f.
Basement Level	790 s.f.

Create a Master Suite!

"FOR ENTERTAINING IT'S PRETTY CRAMPED. YOU HAVE EVERYONE SCATTERED THROUGHOUT THE PLACE WITH TRAY TABLES."

– Mary Schemel

SQUARE FOOTAGE:	
Main Level Addition	58 s.f.
Basement Addition	58 s.f.



MAIN LEVEL

Add on to the back bedroom to create a decent-sized master bedroom with adequate closet space.

Create a stronger link between kitchen and living room by opening up these walls.

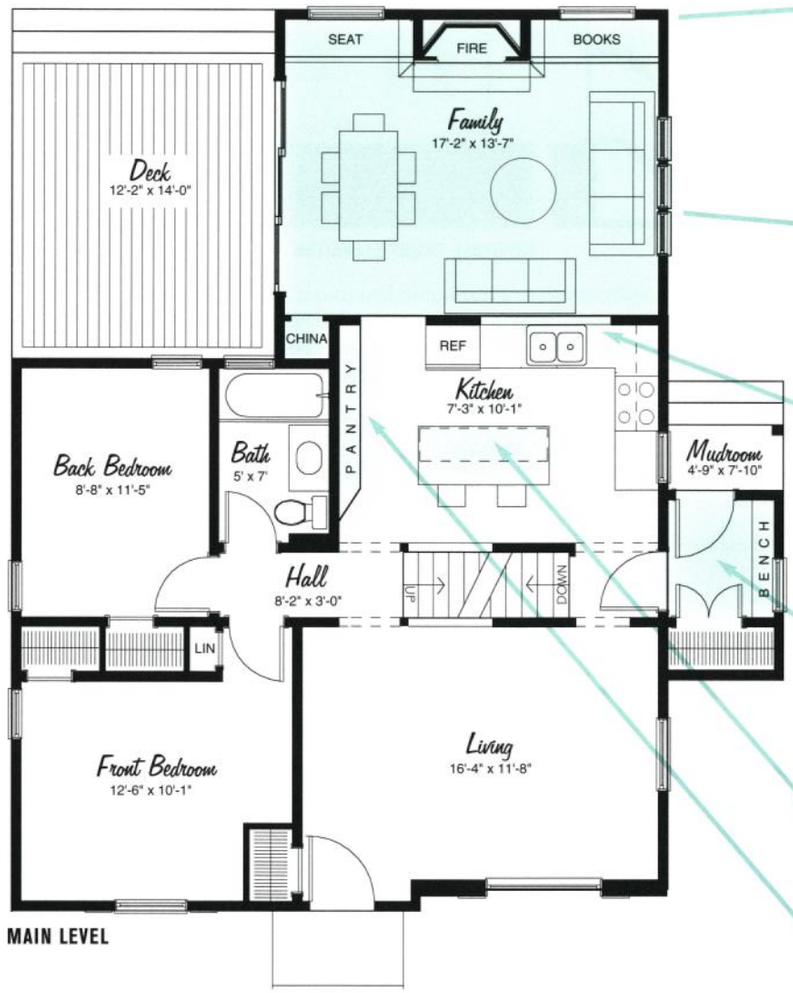
Add a door here to create an optional master suite.

Add french doors between the front bedroom and the living room to create a family room, dining room, or home office.

An axonometric of the master bedroom addition shows the low shed roof tucking in right under the attic window.

Opening up the stairs and wall between the kitchen and living room adds a lot of architectural detail to an otherwise bland space.

Add a Family Room! a Mudroom! Remodel the Kitchen!



MAIN LEVEL

Relax on a window seat next to the fireplace and overlooking the backyard.

Walk directly from the family room to the new deck through a triple sliding French door.

Open up the wall between the kitchen and family room so the cook can be part of the conversation.

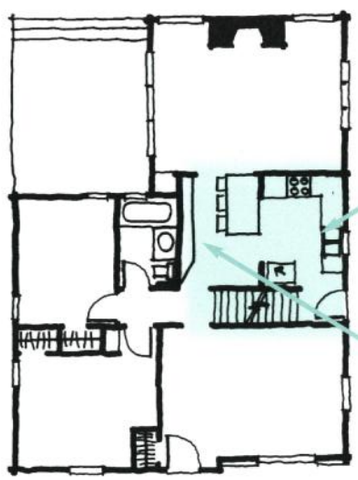
Dump boots, heavy winter coats, heavy bags of groceries in the optional mudroom.

Gather around a new island.

An entire wall of 12" deep pantry cabinets solves storage problems once and for all.

Add on the family room without remodeling the kitchen or adding the mudroom. This shows an interim design step that leaves the existing kitchen untouched.

Add the wall of pantry cabinets and an eating counter.

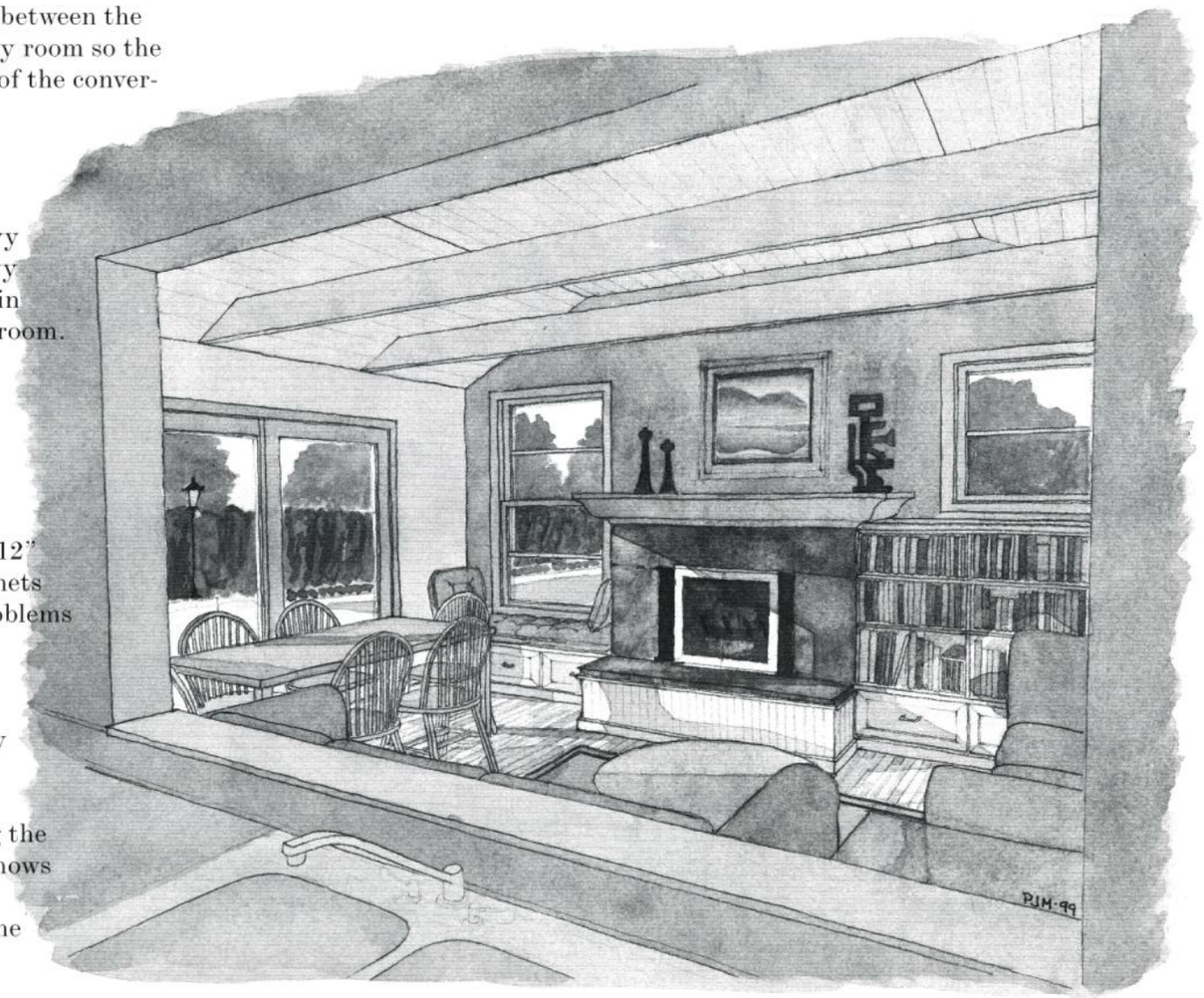


INTERIM KITCHEN

SQUARE FOOTAGE:	
New Main Level	257 s.f.
New Basement	257 s.f.

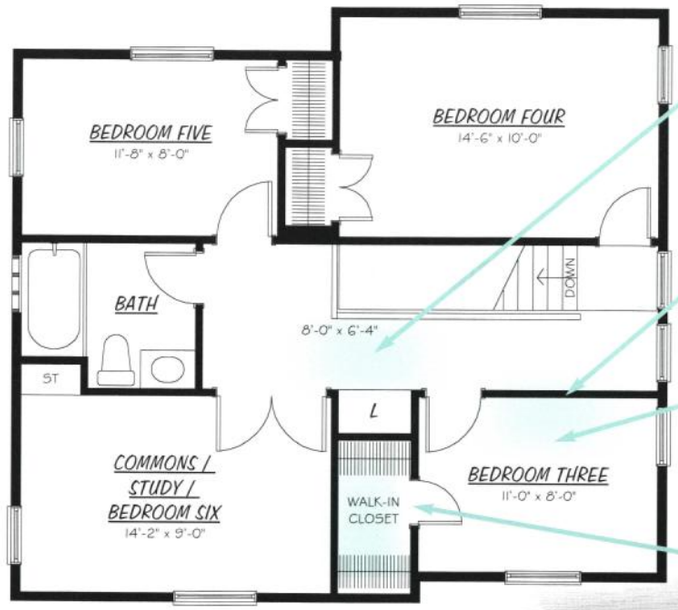
"THERE'S NO REAL DINING ROOM."

– Mary Schemel



Looking from the remodeled kitchen into the new family room. The fireplace vents directly to the outdoors through the wall.

Add a Second Story!



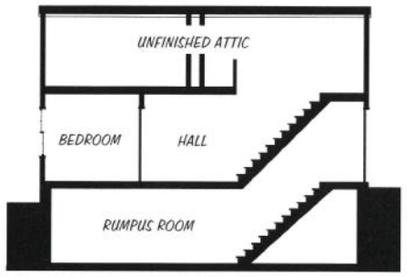
ATTIC LEVEL

The large central hallway is perfect for a children's play space. The railing adds architectural detail.

This wall can be added in later to create a third bedroom.

Use bedroom three as a family room, late night TV lounge, nursery, or home office.

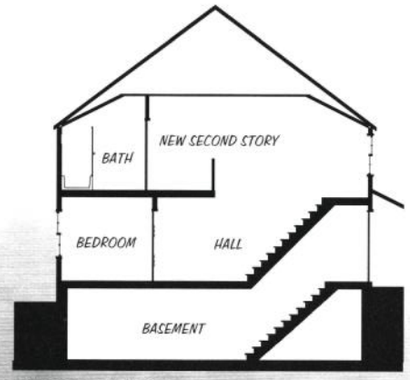
This large walk-in-closet could be accessed from either room.



ORIGINAL BUILDING SECTION

ORIGINAL FRONT ELEVATION

Building code demands that a bedroom have a minimum headroom of 7'-6" over 50% of its minimum 7'-0" x 10'-0" area, and since the highest point in the existing Cape Cod attic is 6'-8", we were forced to tear off the existing attic and build on a whole new second floor. There is no legal way to add bedrooms in the expansion space.

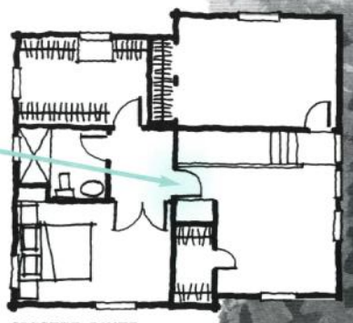


BUILDING SECTION

FRONT ELEVATION

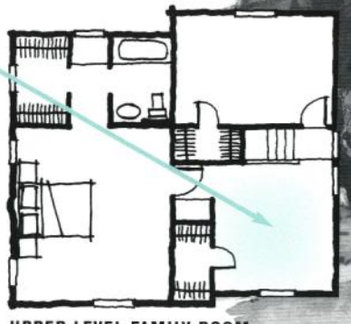
The height of the new second story is determined by the 6'-8" minimum headroom requirement in the stairway. The roof is constructed of scissors trusses that bear only on the existing exterior walls, eliminating the need for interior columns.

Add a door to create a master suite with a private bath and a large dressing room.



MASTER SUITE

Use the third bedroom as a family room, late night TV lounge, nursery, or insomnia refuge.



UPPER LEVEL FAMILY ROOM

SQUARE FOOTAGE:
New Upper Level 790 s.f.

"WE WOULD LOVE TO FINISH OFF THE ATTIC TO HAVE A MASTER SUITE WITH A NURSERY... AND A BATH!

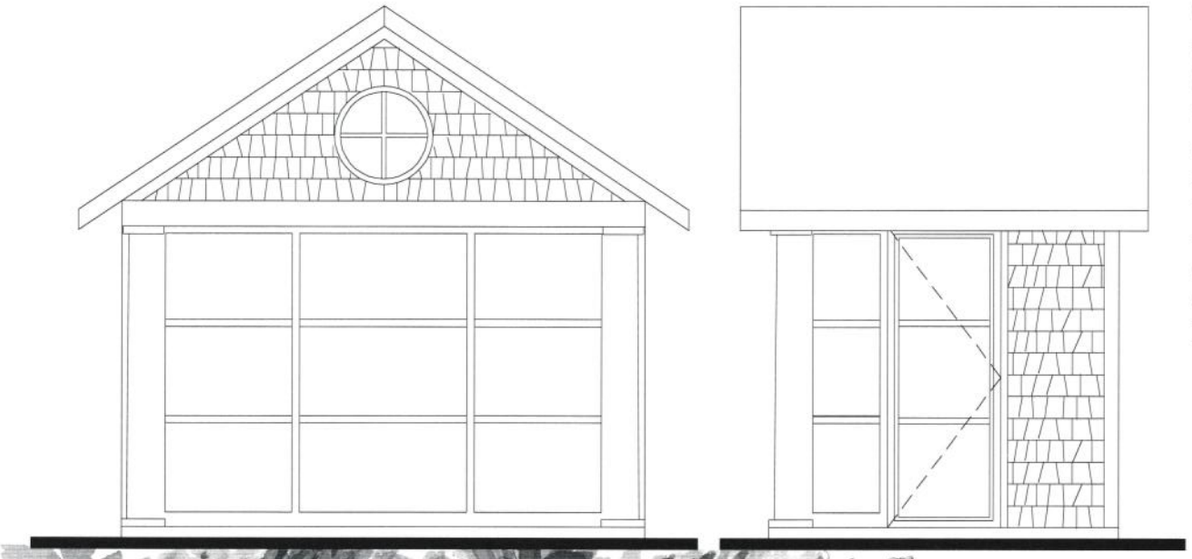
– Jim Schemel

The new second story mimics the story-and-a-half, multiple-gable roofline of the existing Cape Cod.

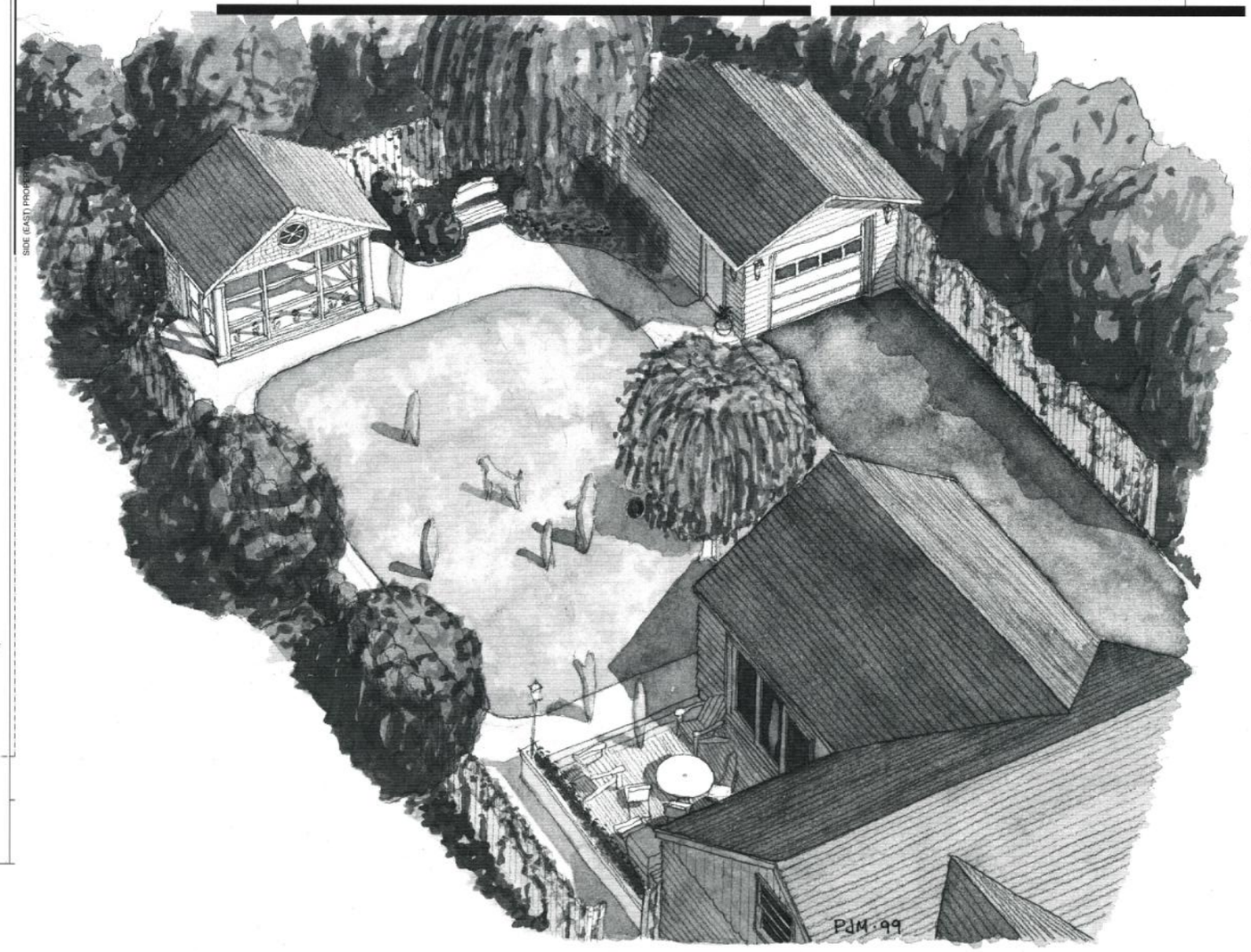
Add a Summer House!

Locating the summer house at the rear of the property helps define the backyard and helps make the house feel more spacious by seasonally expanding the living space into the entire backyard. Walking paths define a central yard for play and flower beds line the fence.

SITE PLAN



The Summer House, a free-standing screen porch, is a Scandinavian tradition perfect for the Minnesota climate. This small porch can only be used during those summer months when the mosquitoes fly, but during that time it's the perfect outdoor sanctuary. The design is a mix of Colonial Revival and post-war Modern.



"A building permit shall not be required for the following: One-story detached accessory buildings used as tool and storage sheds, playhouses, and similar uses, provided the floor area does not exceed 120 square feet."

1999 UNIFORM BUILDING CODE 106.2.1

SQUARE FOOTAGE:	
Summer House	96 s.f.

Meet Mary Boyle
RAMBLER WITH A DETACHED GARAGE

Mary Boyle grew up in a Blaine rambler much like the 1960 Vern Donnay model she owns today.

"When I was looking for a house to buy in 1994, I looked mainly at ramblers about this age and homes a little older," says Boyle. "I was living in a townhouse–my first house–and I wanted my own yard. I thought I'd like a garden, and I just wanted a little more privacy in my yard and a little more room."

Boyle, who works as a county assessor, says she thought her two-plus bedroom rambler with detached garage was "perfect" when she first saw it.

"I like the hardwood floors and the solid construction," she says. "It really is the right size, I think, even if you had a couple of kids."

Boyle's home sold for $11,000 back in 1960. It was one of 5,000 ramblers and split-levels constructed in Blaine by Vern Donnay, whose company built entire neighborhoods in Bloomington and Blaine in the '50s and '60s. During the height of the building boom, Donnay was e-recting five homes a day.

"I WANTED A RAMBLER. I LIKE THE RAMBLER STYLE."

Mary Boyle

"We were the big builders, along with Orrin Thompson and Marv Anderson," says Donnay. Houses were sold with G.I., FHA, and conventional mortgages, as well as for cash.

The scramble for affordable housing experienced in the '60s has not abated. Perhaps only the concept of what "affordable" actually means has changed. Boyle found her $11,000 rambler to be affordable at $86,000 in 1994. In 1999, her house is worth just over $100,000. That is still considered affordable in today's housing market.

Boyle says she found herself competing with four other buyers when she chose her rambler, even though she spotted it the day the sign went up. She bid more than the asking price. That, and being pre-approved for a mortgage helped her swing the deal.

Although she actually qualified for a mortgage of $110,000, Boyle says she wasn't interested in the "buy as much house as you can" pitch, which is heard so often by today's home buyers.

"I could have gotten 'more home,' but why?" she says. "My mortgage payments are affordable at $675. I didn't want new, and I didn't want to go to my limit."

Boyle likes her location and the close-knit, friendly community. The woman she bought the home from went to her high

school and Boyle's family still lives in Blaine.

"Shopping is very convenient here," she adds. "All the necessities are near by, but if I want to go to, say, the Mall of America, if I time it right I can be there in 40 minutes. I work just north of here, so I'm going against the traffic both ways. I like not being tied up in traffic."

If she could change anything about her house, Boyle

"IT'S HARD TO PUT MY FINGER ON, BUT WHEN I WALKED IN IT JUST FELT LIKE HOME. IT'S COMFORTABLE FOR ONE PERSON."

– Mary Boyle

says, it would be to add eating and entertainment space, perhaps with a fireplace, and to add a new bath with whirlpool for the master bedroom.

"I end up hosting a lot of family functions, and it would be nice to have a little bit more room when the whole family is here."

Boyle says her 80 x 125 backyard could easily accommodate an addition to the back of the house that would expand the kitchen, creating an island work area and more cupboard space to go along with a new informal eating area. The third bedroom, a walk-through one just off the kitchen, would become a larger family room.

Boyle says she'd like to make the expansion improvements, and sees herself living in the home for some time.

"I definitely see myself staying for another 15 years or so," she says. "I only see myself moving if I decided I wanted to travel more–or if I met Mr. Right."

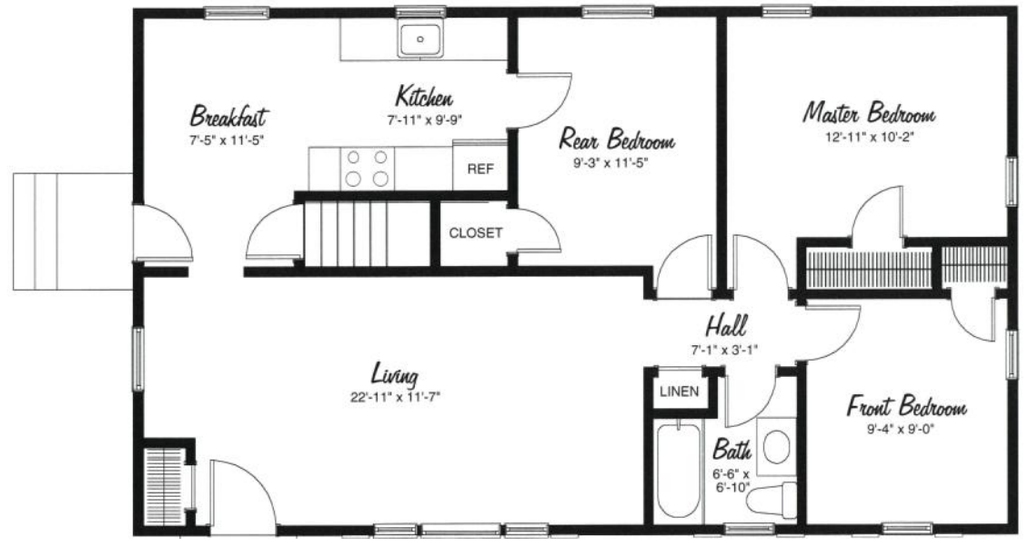
The county assessor says she views her home and others like it as excellent values–superior, in fact, to new construction.

"There are some new engineered construction materials that are very good, but the workmanship doesn't seem to compare," she says. "And I don't like the style of new homes. They're like big, open vaults. I like divided rooms. I like a traditional look.

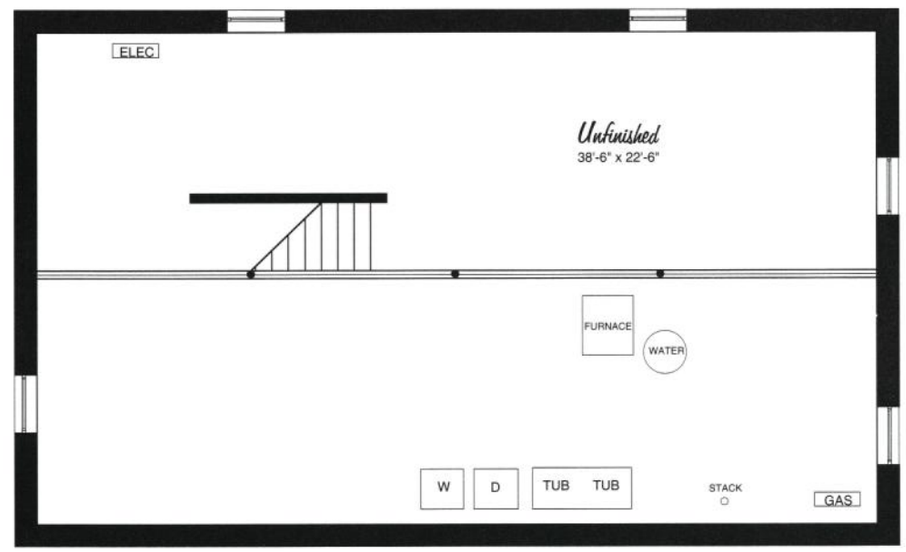
"Besides, you have a lot of expenses with a brand new home," she continues. "You need all the window treatments, you just have a base coat of paint, you need to deal with the builder, and that's a headache. I wanted pre-owned."

For Boyle, ramblers are a sentimental and a practical favorite.

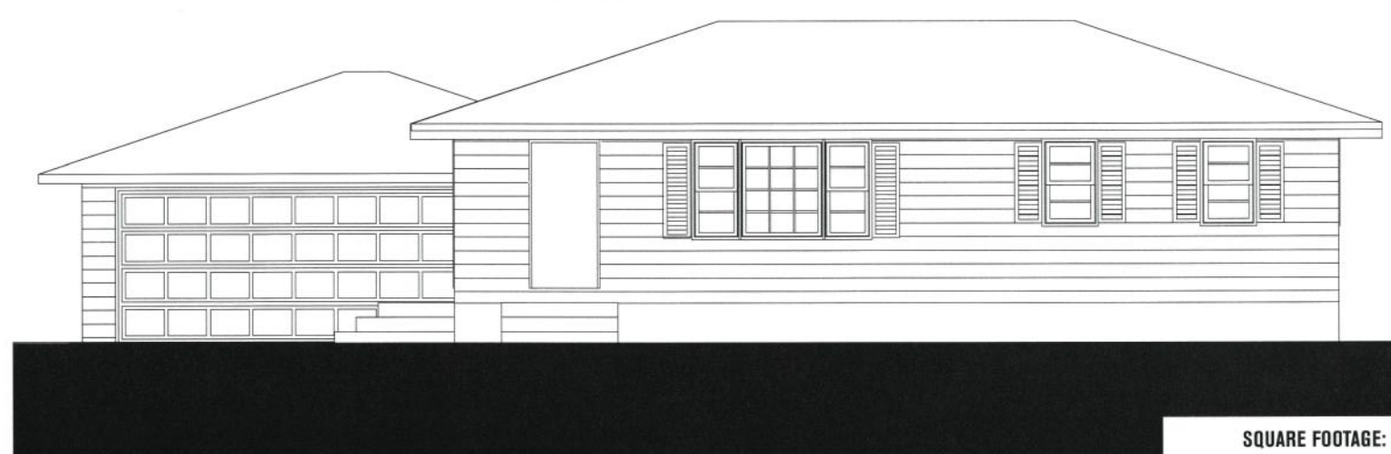
"I like the rambler style. They've got great curb appeal."



ORIGINAL MAIN LEVEL



ORIGINAL BASEMENT LEVEL



ORIGINAL FRONT ELEVATION

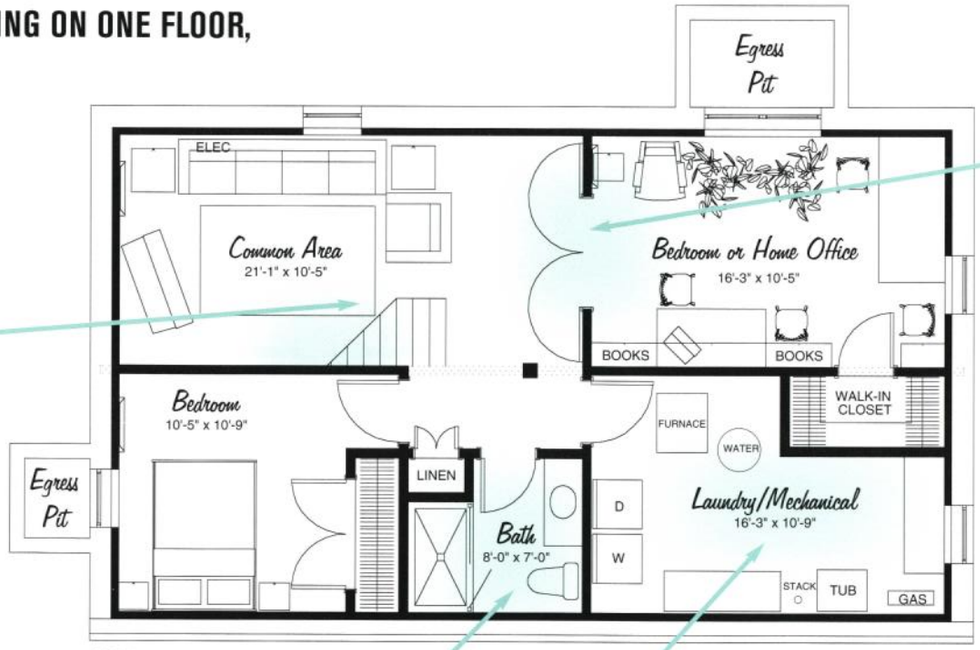
SQUARE FOOTAGE:

Main Level	976 s.f.
Basement Level	976 s.f.

Finish Off the Basement!

"MY IDEAL WOULD BE A HOUSE WITH EVERYTHING ON ONE FLOOR, WITH THE BASEMENT ONLY FOR MECHANICALS AND SOME STORAGE."

– Mary Boyle



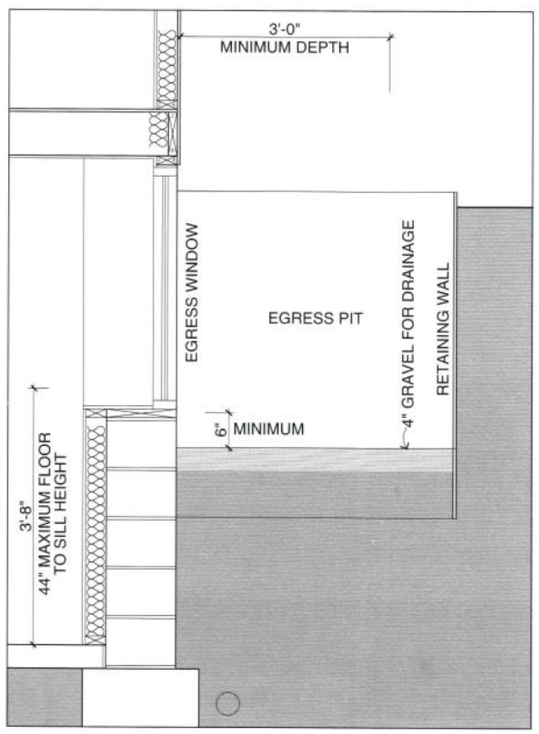
BASEMENT LEVEL

Add French doors and an egress window to make this bedroom a perfect home office.

Open up the stair wall to make this long, narrow room feel more connected to the Main Level. It makes a perfect TV lounge.

Locate the bath by the existing plumbing stack to minimize jack-hammering up the basement slab.

Mechanicals are expensive to move, so leave them where they are.

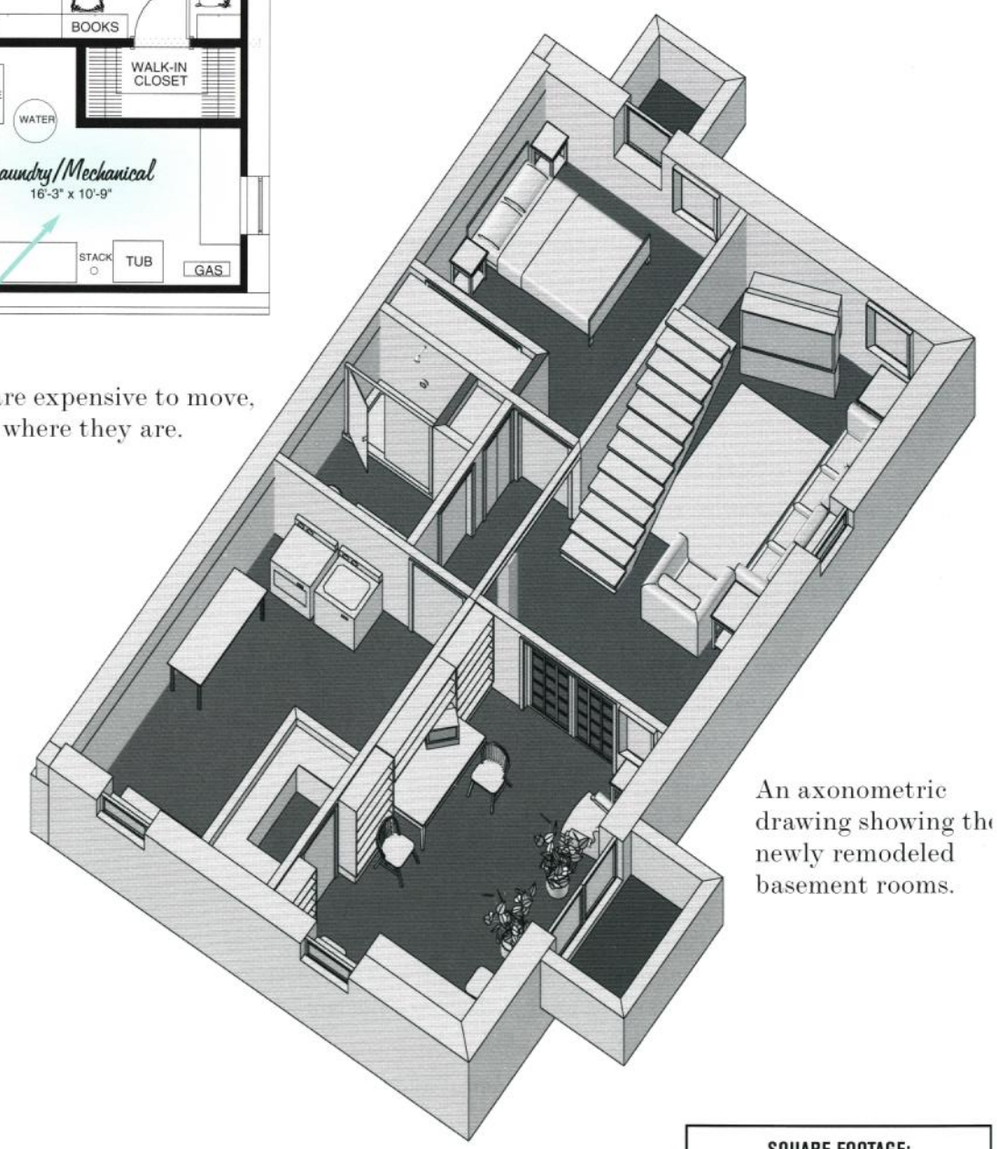


BASEMENT EGRESS WINDOW

Typical post-war houses had only tiny cellar windows in their basements. If there was a fire, your only chance of escape was up the stairs. Today's building code strictly enforces the addition of basement egress windows if any substantial work is done to the basement.

The basement egress window must meet all the requirements of a typical bedroom egress window, but in addition it must exit into an "egress pit" which has its own requirements. The pit must extend a minimum of 3'-0" in front of and a minimum of 6" to the side of the window. The egress pit must extend a minimum of 6" below the window and have a minimum area of 9 s.f.

Logically, a person must be able to stand up in the egress pit, so it can't be located beneath a cantilever or other obstruction. Also if the pit is deep, you must provide a stairway or ladder to exit the pit.



An axonometric drawing showing the newly remodeled basement rooms.

SQUARE FOOTAGE:

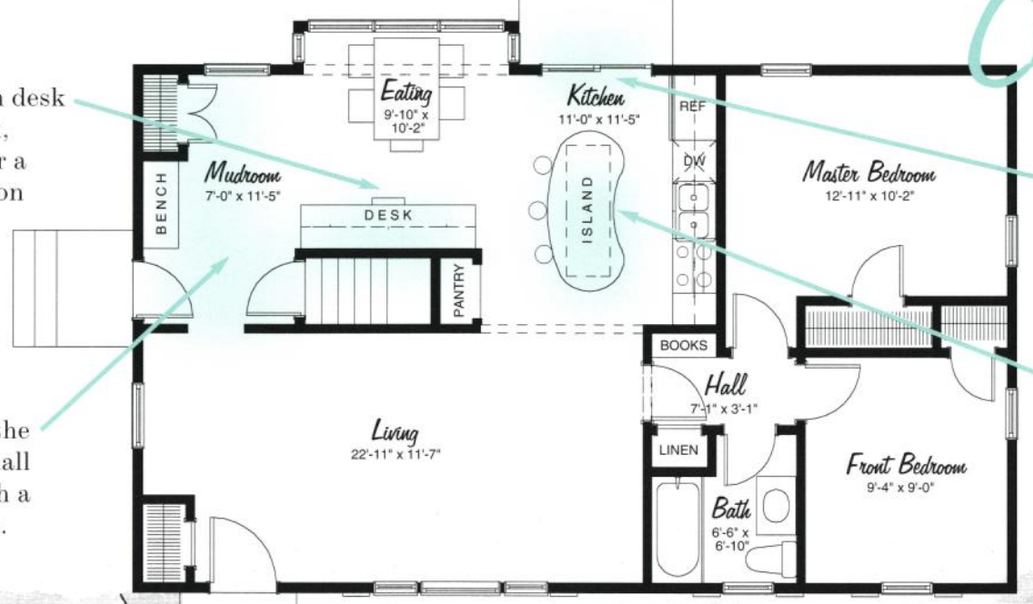
Basement Remodel 866 s.f.

Remodel the Kitchen! Create a Main Level Master Suite!

Bump out the eating area to gain light from three sides and a view to the backyard.

Add a built-in desk for homework, a computer, or a central location for phone and mail.

Steal part of the space for a small mudroom with a built-in bench.



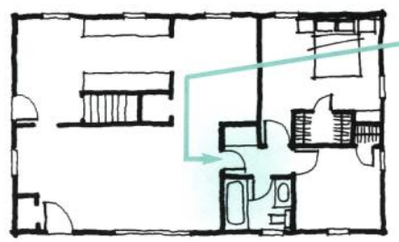
MAIN LEVEL

Add a sliding French door in the kitchen for direct access to the patio.

Gather around the new kidney-shaped island during parties or after work.

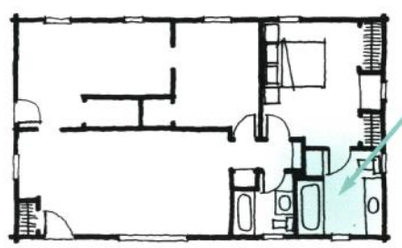
"THE KITCHEN IS TOO SMALL. IT NEEDS MORE STORAGE AND MORE CUPBOARDS. I'D LIKE AN ISLAND WORK AREA."

– Mary Boyle



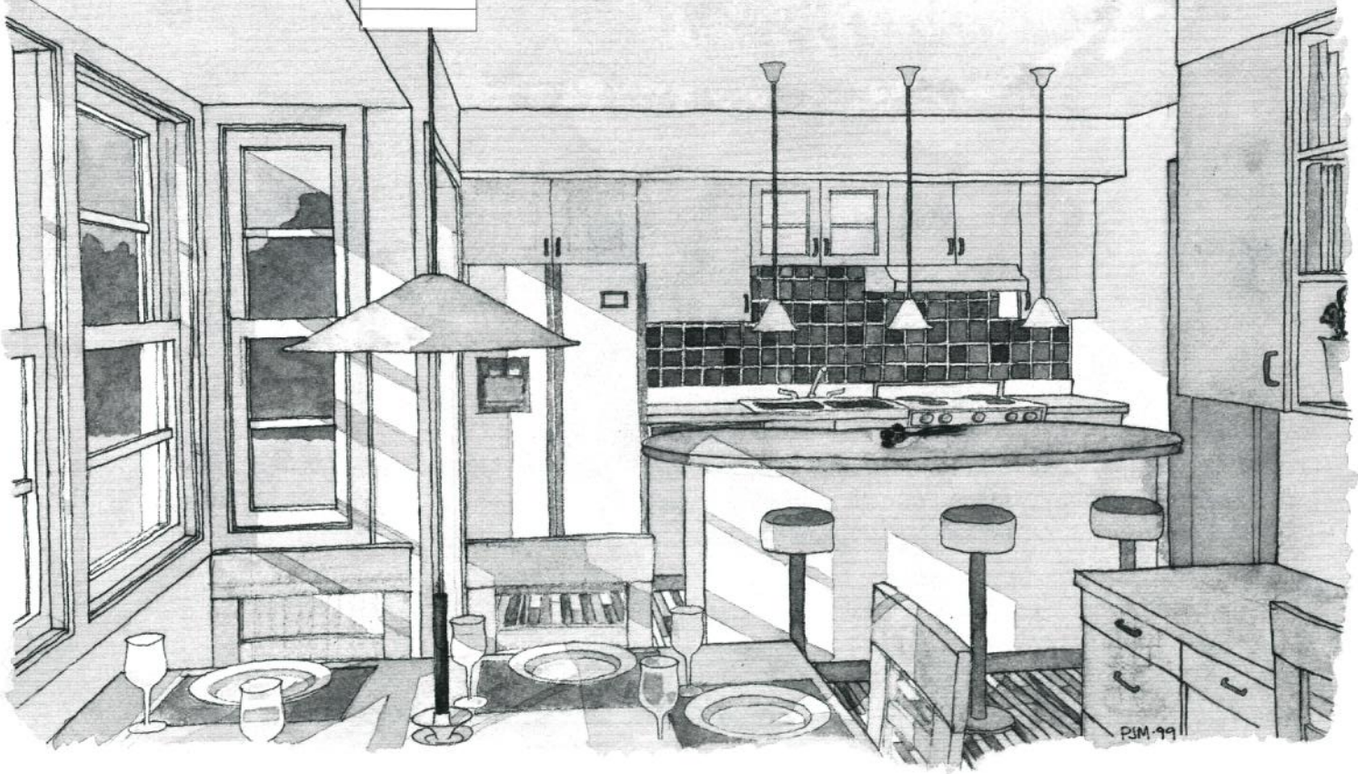
MASTER BEDROOM

Add a door here and rework the walls and bath to create a master suite with a walk-in closet, a master bath, and a study or nursery.



MASTER SUITE

Steal the second bedroom and use the space to make a luxurious master suite with a spacious bathroom and whirlpool tub.



Ramblers trace their roots back to the California Ranch houses designed by Cliff May and the Usonian houses of Frank Lloyd Wright, but rarely did the mass-produced houses successfully open the house to the backyard.

SQUARE FOOTAGE:	
Addition	22 s.f.
Remodel	280 s.f.

What Makes a Good Front Porch?

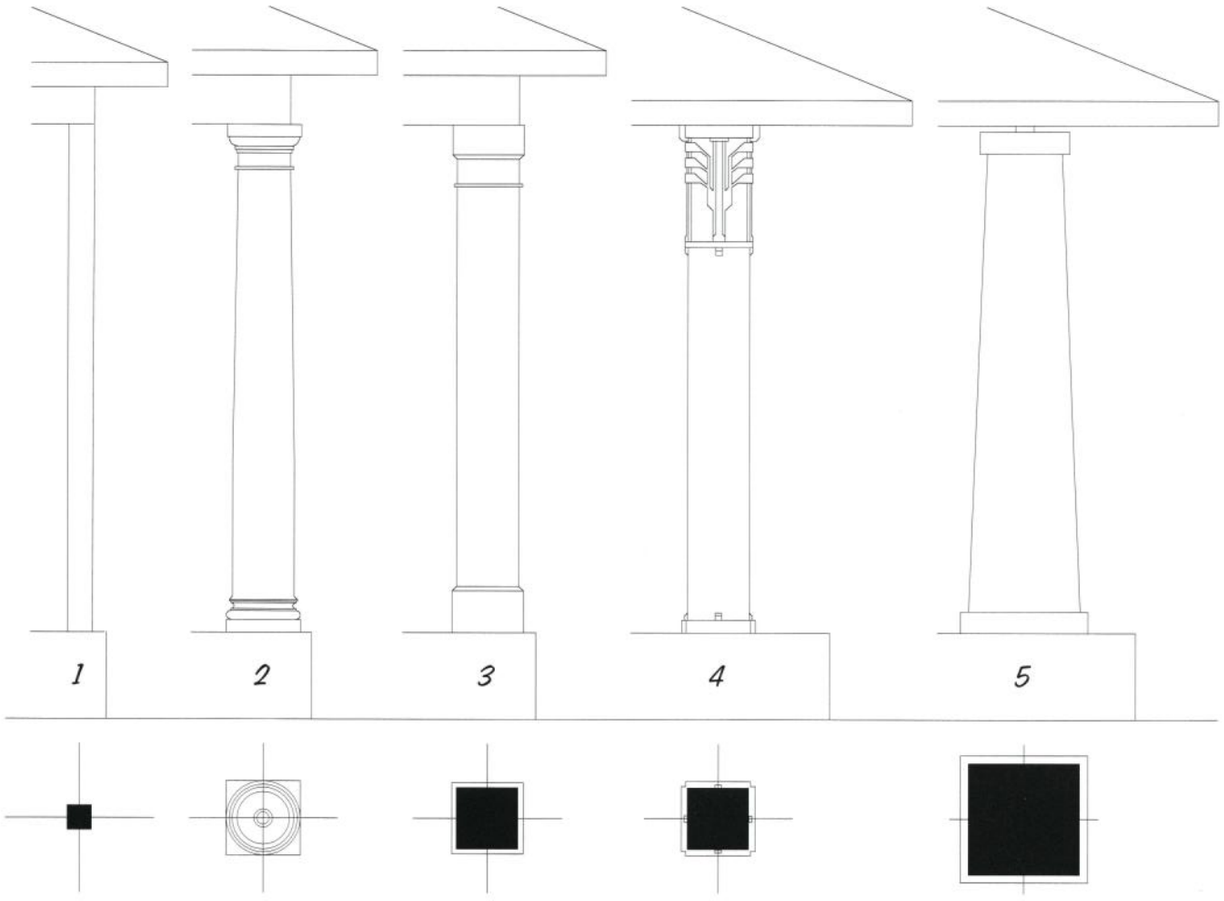
Nothing makes a neighborhood feel more friendly and welcoming than some inviting front porches. Yet few post-war houses were built with porches. Builders stripped designs of every unnecessary stick to save time and money, and buyers were obsessed with big backyards for the Baby Boom children—who were just being born—to play in.

WHAT MAKES A PORCH SO MAGICAL?

A porch is an invitation to sit and relax. It creates a relaxed, informal transition between the private home and the public street.

WHAT ARE THE ELEMENTS OF A GOOD FRONT PORCH?

•The roof pitch, overhangs and soffit should match the existing house. •The columns not only carry the roof load of the porch, but express the house's architectural character. •The porch floor should be high enough to give a feeling of separation from the street and a view out over the yard. 18" is the absolute minimum. •The porch stairs should be wide enough for at least two adults to sit side by side and visit. •Wide porch steps are also a wonderful place to place pots of flowers. •The porch should be deep enough to gather several chairs in a good sitting circle. 8'-0" is ideal, 6'-0" is an absolute minimum.



Detail added to the porch–particularly to the porch columns–will animate the entire front of your house. The standard 4x4 post (1) adds little or no detail. A stock classical column (2) or square column built up out of stock millwork (3) are most appropriate on a Colonial Revival style, such as a Cape Cod. A creative and unique Prairie-style column (4) works better on a rambler, as does the battered column (5) shown in the perspective (right).

"I'D LIKE TO PUT A PORCH ON THE FRONT. A NICE, WOOD-PILLARED PORCH WOULD BE NICE. RIGHT NOW I DON'T USE THE FRONT YARD AT ALL."

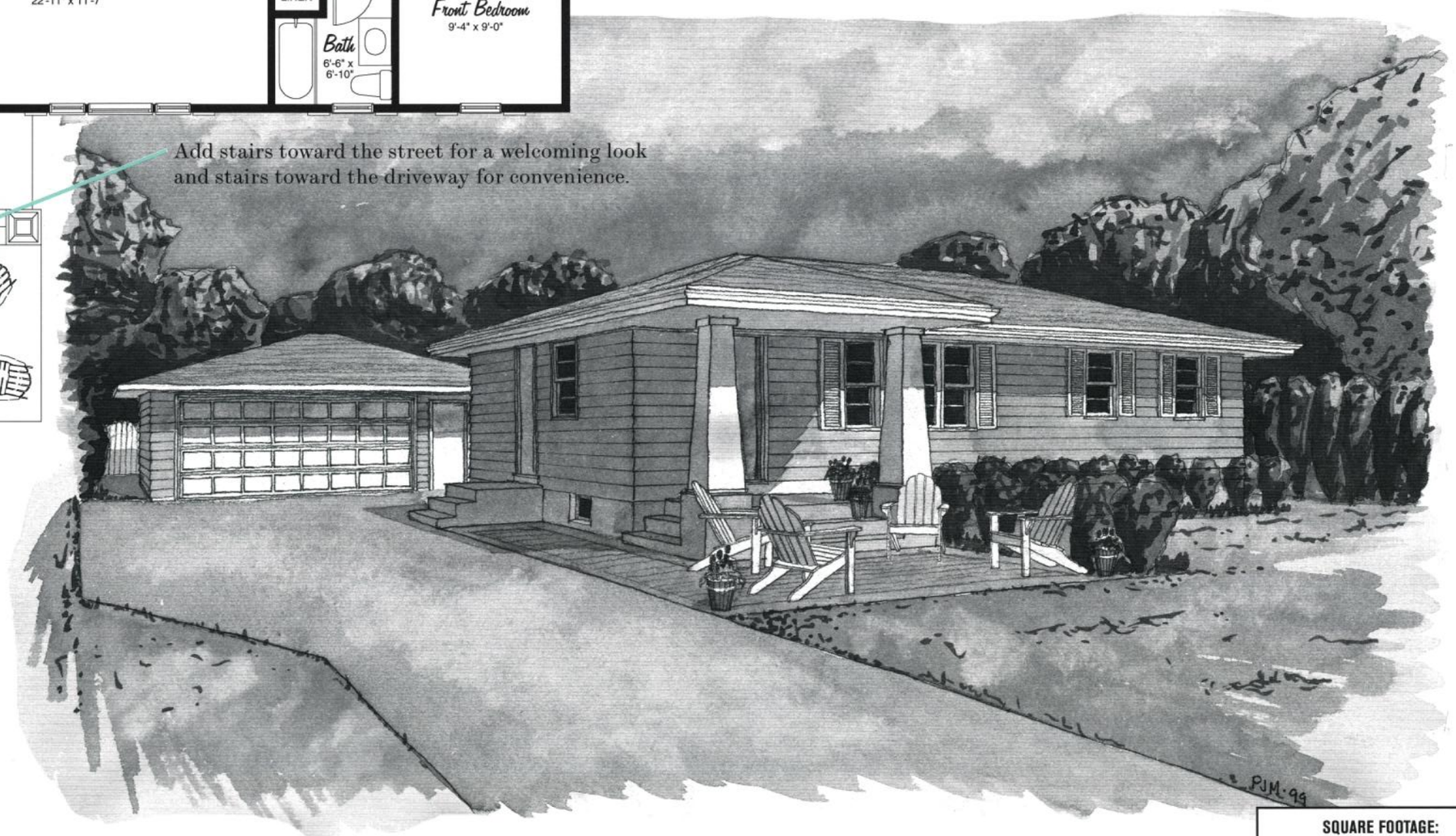
– Mary Boyle

Add a Front Porch!

"THE MATERIAL CHANGES IN THE NEIGHBORHOOD HOUSES ARE OKAY, BUT THEY LACK CHARACTER."

– Mary Boyle

Add stairs toward the street for a welcoming look and stairs toward the driveway for convenience.



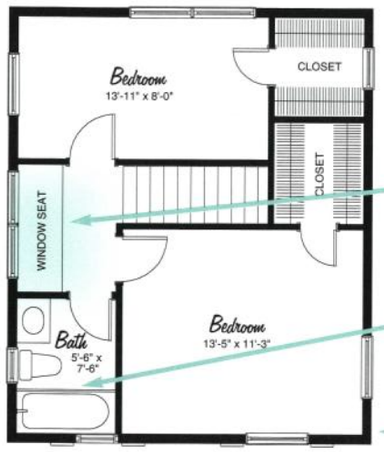
A small front porch adds a warm, welcoming, friendly face to the neighborhood. This particular porch is only big enough for one comfortable chair, but the steps are intentionally wide and shallow to create places to sit and hang out. Adding even a small patio in front of the porch creates a place to hang out in the front yard itself.

SQUARE FOOTAGE:	
Addition	79 s.f.

"I SEE MYSELF LIVING HERE FOR A LONG TIME."

– Mary Boyle

Add a Second Story!



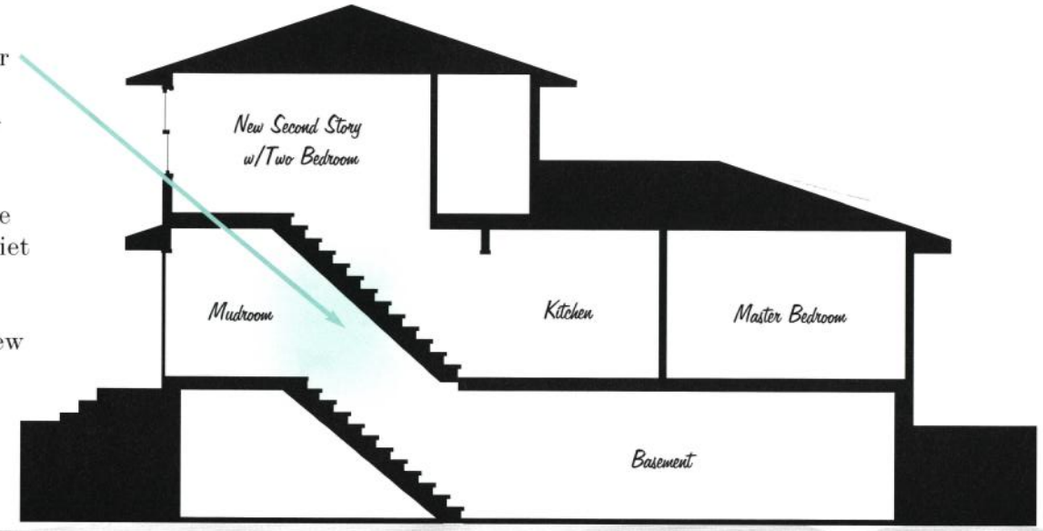
UPPER LEVEL

Stack the new stairs over the existing basement stairs for maximum construction efficiency.

Add a window seat at the top of the stairs for a quiet place to read or visit.

Run plumbing for the new bath through the main level coat closet.

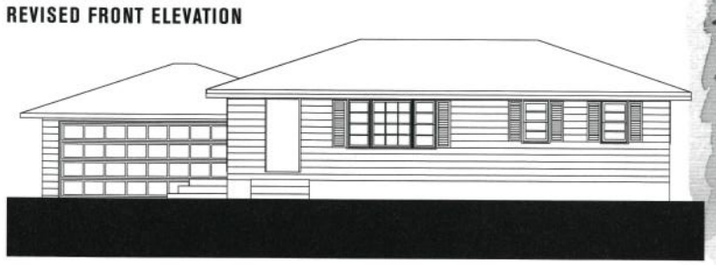
Bearing wall



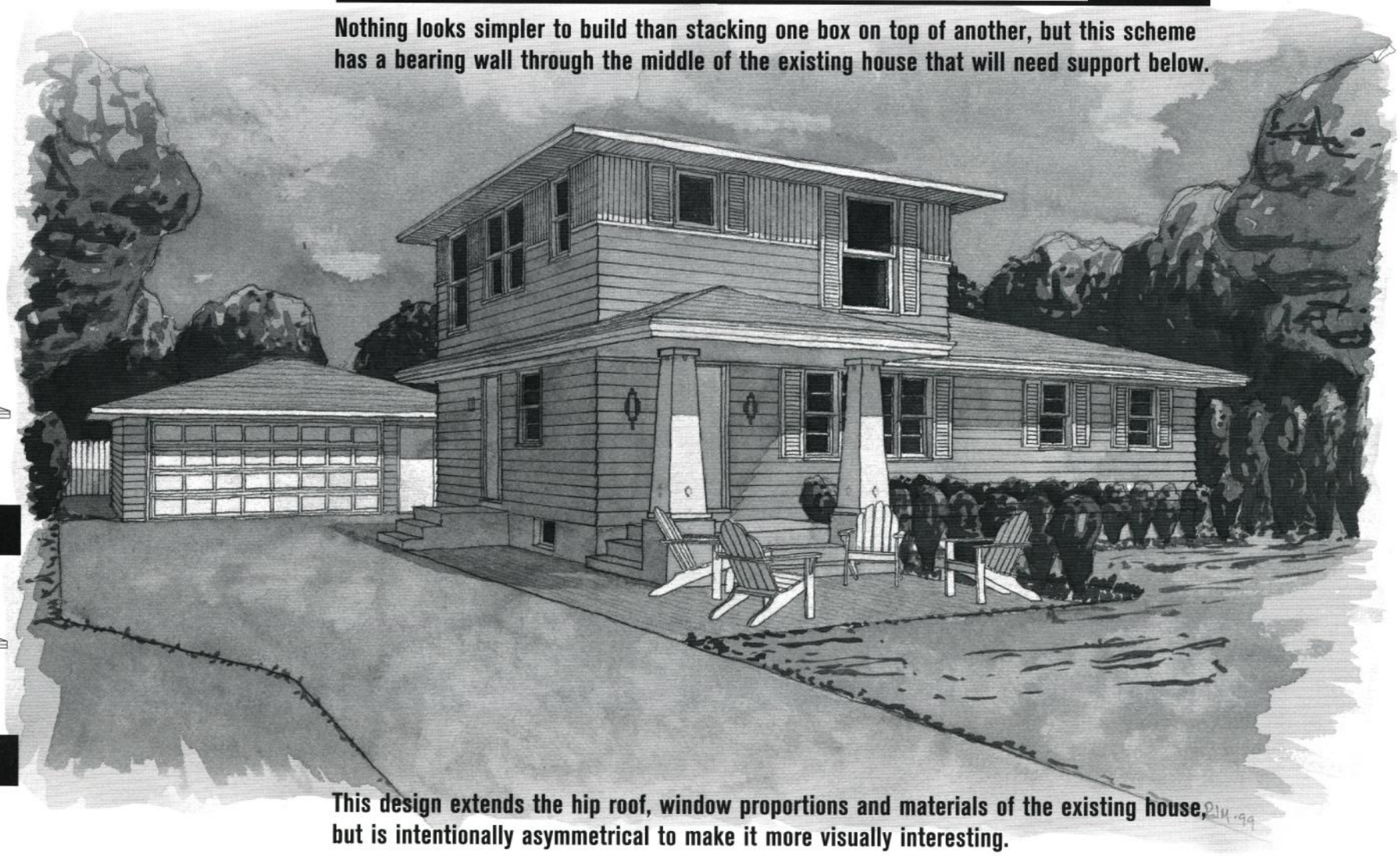
Nothing looks simpler to build than stacking one box on top of another, but this scheme has a bearing wall through the middle of the existing house that will need support below.

SQUARE FOOTAGE:	
Upper level	488 s.f.

REVISED FRONT ELEVATION



ORIGINAL FRONT ELEVATION



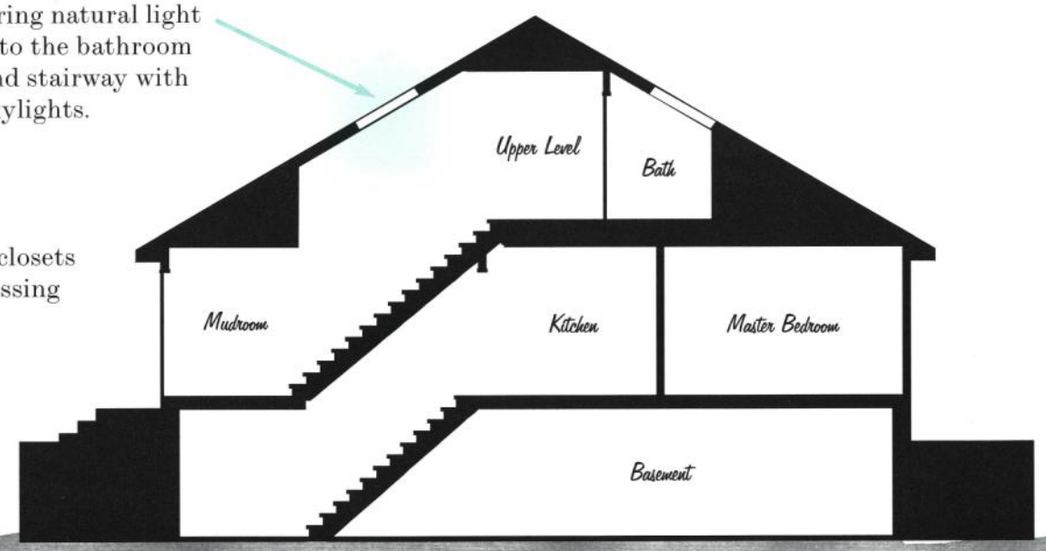
This design extends the hip roof, window proportions and materials of the existing house, but is intentionally asymmetrical to make it more visually interesting.

Add a Second Story!

UPPER LEVEL

Make big walk-in closets that double as dressing and play rooms.

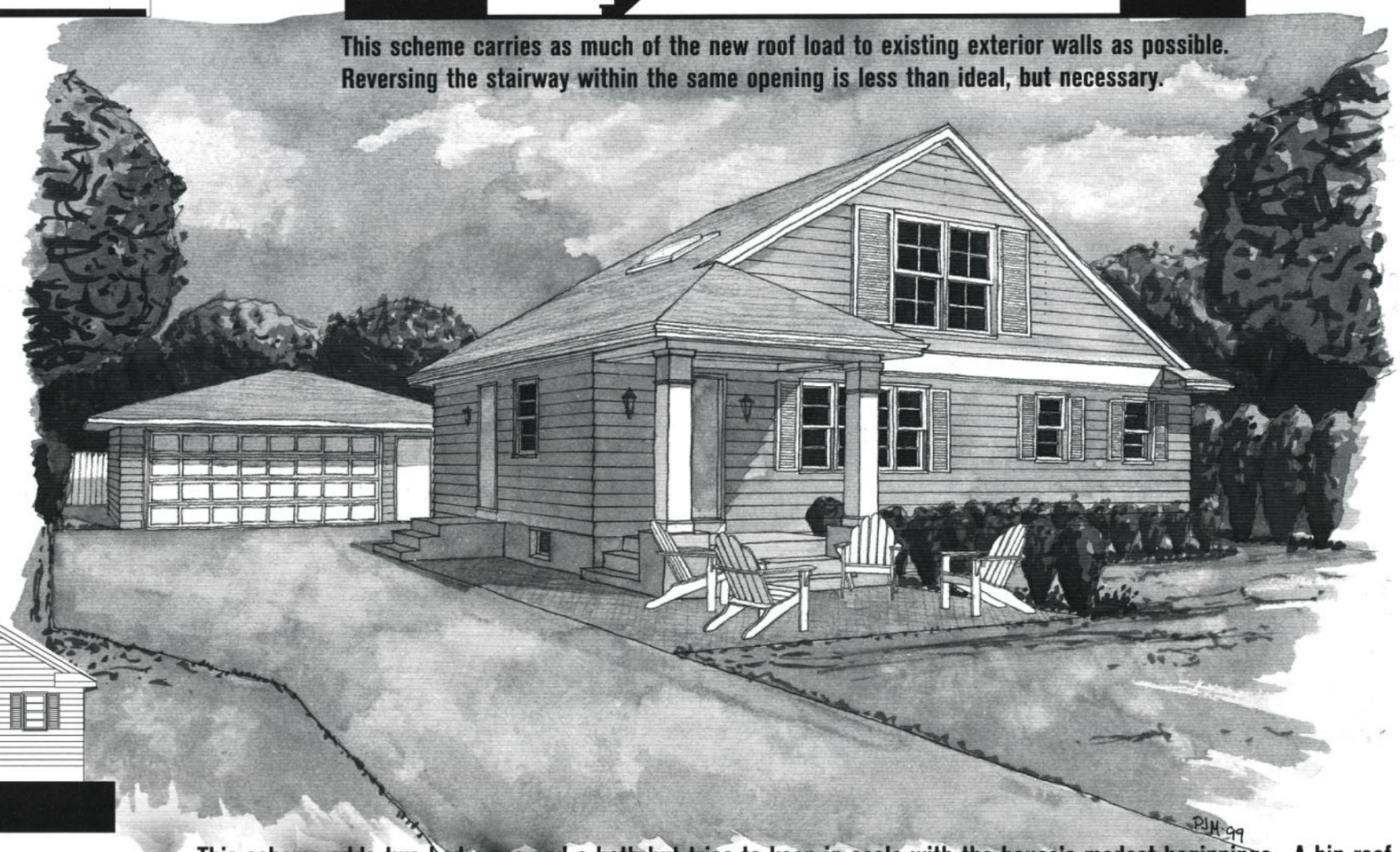
Bring natural light into the bathroom and stairway with skylights.



This scheme carries as much of the new roof load to existing exterior walls as possible. Reversing the stairway within the same opening is less than ideal, but necessary.

SQUARE FOOTAGE:	
Upper level	480 s.f.

REVISED FRONT ELEVATION



This scheme adds two bedrooms and a bath but tries to keep in scale with the house's modest beginnings. A hip roof over the porch echoes the existing garage.

Meet the Duffeys
RAMBLER WITH ATTACHED GARAGE

Pam and Jack Duffey have put down roots in their 1954 brick and shingle Richfield rambler almost without noticing it. They originally wanted a two-story house, but they liked the location, the pool, and all the updates that this house had to offer. But even though they bought it with the idea of rapidly moving on, they've been living here for 14 years.

"We weren't convinced we were going to stay long," says Pam. "Especially since I really wanted space for the children on a second floor."

Today their oldest child, Ben, is 22 and in college, and Megan, 17, will start next year. Daughters Molly and Emily are 16 and 13.

Emily is the rambler's staunchest defender. "Our daughter Emily loves this house," says Pam. "She doesn't want to move, even to another place in Richfield.

The Duffeys paid $95,000 for the house in 1984, and today it is appraised at $135,000. It sold for somewhere around $15,000 in 1954. The rambler was the work of Stanley Johnson, who worked with a partner in the construction firm of Jungell and Johnson. Johnson bought 10 lots on the Duffeys' block and built a house on each. He and Larry Jungell did it all, from framing to fireplaces to finish carpentry.

Johnson remembers the Duffey rambler, because he built it specially for its first owners. They wanted their basement to be a special area to entertain. It included a smart linoleum tile floor and a wet bar, while most of Johnson's houses had unfinished basements. He recalls that he and Jungell built 200 houses during their careers, in Richfield, Bloomington and East Edina. Most sold by word of mouth.

These first-tier suburbs remain convenient places to live. The Duffeys like living in Richfield. It's a quick drive for Jack, who works at the airport, and homes are affordable. It's also a very friendly community.

"People are always walking down the street and stopping to talk," says Pam. "It would be a great neighborhood for a front porch."

While they've considered moving, both say they would consider staying if they could just turn this 1954 rambler into their dream home. Right now, aside from the quality construction and great neighborhood, they don't have a lot to list in the plus column.

"I like the first floor bedroom–especially as we're getting older–and the fact that the house is well-made," says Jack.

"I don't like the boxiness," says Pam. "I like character and uniqueness, and I don't see that this house has it."

Pam says that part of the problem is the home's interior palette. The pale tan brick fireplace that dominates the south end of the living room says "1950" loud and clear. The limed oak woodwork suggests that the home would look best furnished in Danish modern.

"I'm sure Danish modern would look right, but that just isn't me."

She would also like the house to have a more modern floor plan.

"When you open the front door, you walk into the living room. That's not unusual, but when you have 10 kids over visiting, dropping their shoes, and walking through, it can be a problem. I'd like a bigger entry, and a side or a kitchen entry as well."

Pam says with their finished basement, they've added as much storage space as they can, but they still would like more, especially in the kitchen.

"There is very inadequate cupboard space," she says. "You don't want to be around when I am cooking and have to get things out. We have one cabinet. I use the broom closet for food storage and brooms." She would like to see the kitchen expanded, adding a work island/breakfast bar, "and lots of windows."

"I DON'T LIKE THE BOXINESS. IT'S A PERFECT RECTANGLE DIVIDED INTO LITTLE BOXES."

– Pam Duffey

ORIGINAL LOWER LEVEL

ORIGINAL MAIN LEVEL

The couple also has to share the only main-level bath with the rest of the family. Pam would like to have a master suite with a separate bath.

"What can be a real annoyance to me is our four kids and us all using one bathroom," she says. "And when guests are over it's the one they use, too." In the summer, with the backyard pool, the bath is often full of towels and wet bathing suits as well.

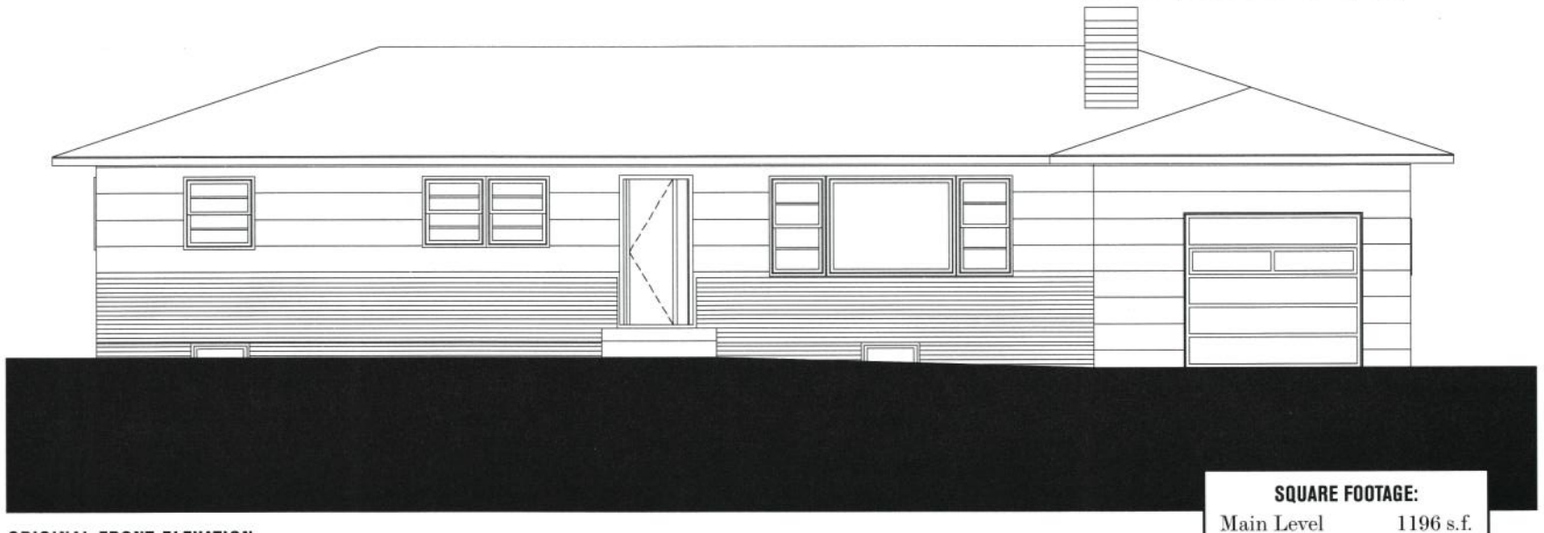
But it is that pool, and the attached single-car garage, that have always blocked plans for expanding the house–for two reasons. First, there is no room on the side of the lot to add a stall to the existing garage. Second, even if the couple built their two-story dream home, they'd still have a single-car garage. That might be a difficult sell when it finally came time to move. They aren't sure they would be able to recoup their investment.

"The garage has always held us back," says Jack. "We typically have two or three cars, and sometimes can end up with four or five cars and a driveway full of bikes in the summer. I suppose we could widen the driveway so that it could hold two cars side by side, but it would be nice to be able to have a larger garage."

The Duffeys have lived with their house's limitations for a long time. But the fact that they are still here, and considering a large remodeling project, shows that the house's construction, and its friendly, convenient neighborhood, have held them here.

If they can find solutions to their home's problems, the Duffeys are likely to stay on.

"I still want a house that the kids can come back to visit, with the grandkids," says Pam. "But the first floor would be for us."



ORIGINAL FRONT ELEVATION

SQUARE FOOTAGE:

Main Level	1196 s.f.
Basement Level	1196 s.f.

Create a Main Level Master Suite!

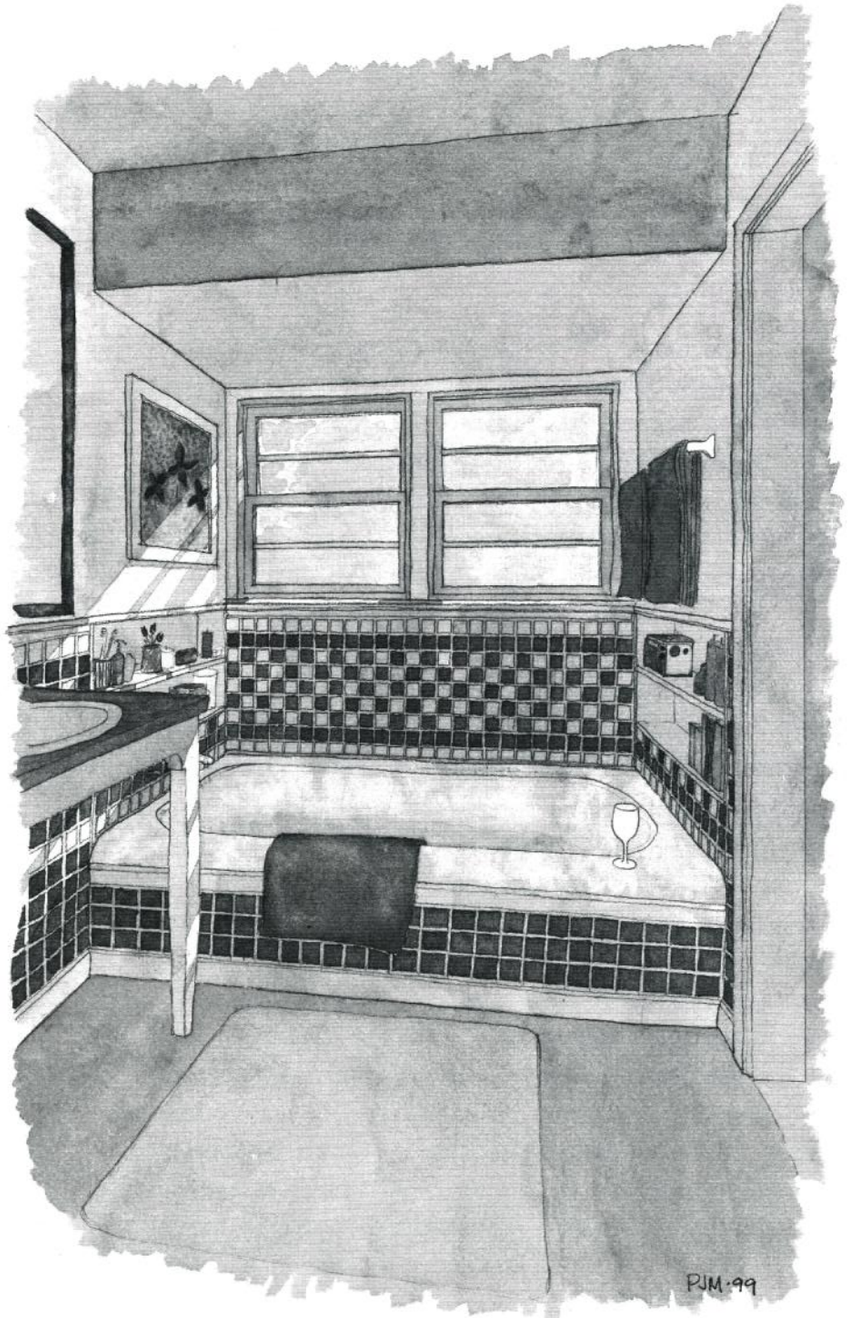
ORIGINAL MAIN LEVEL

Create a walk-in closet.
It doesn't have to be big
to be luxurious.

**"NOW THAT WE'RE GETTING OLDER,
A FIRST FLOOR MASTER SUITE IS IMPORTANT."**

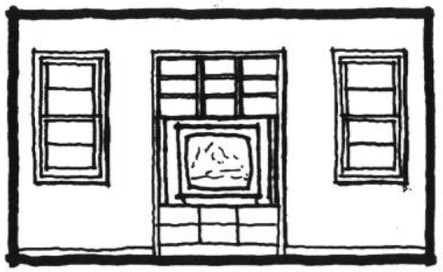
Pam Duffey

SQUARE FOOTAGE:	
Remodel	230 s.f.



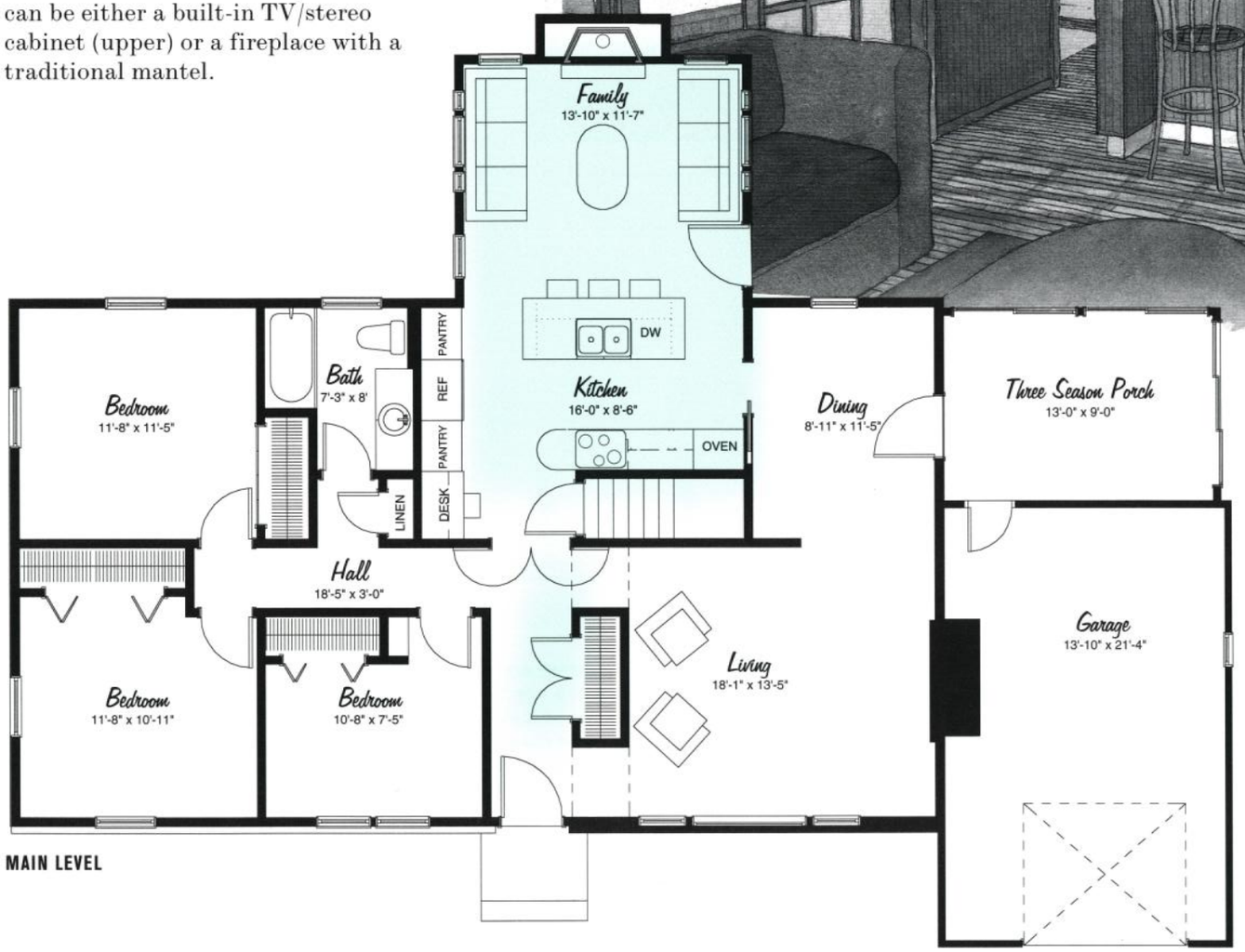
Separate tub and shower units allow someone lying in the tub in the late afternoon to enjoy the evening light.

Add a Family Room! Remodel the Kitchen!

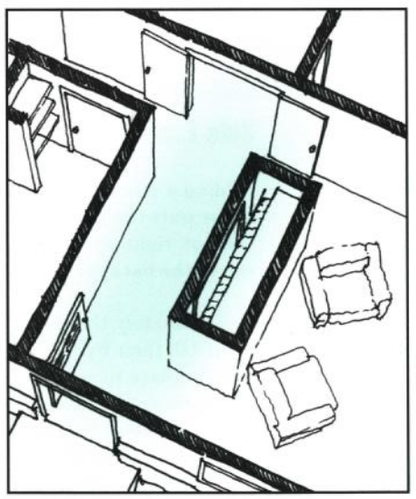


The focus of the new family room can be either a built-in TV/stereo cabinet (upper) or a fireplace with a traditional mantel.

The entire house revolves around this newly remodelled kitchen, which has plenty of storage space and room for friends and family to gather.



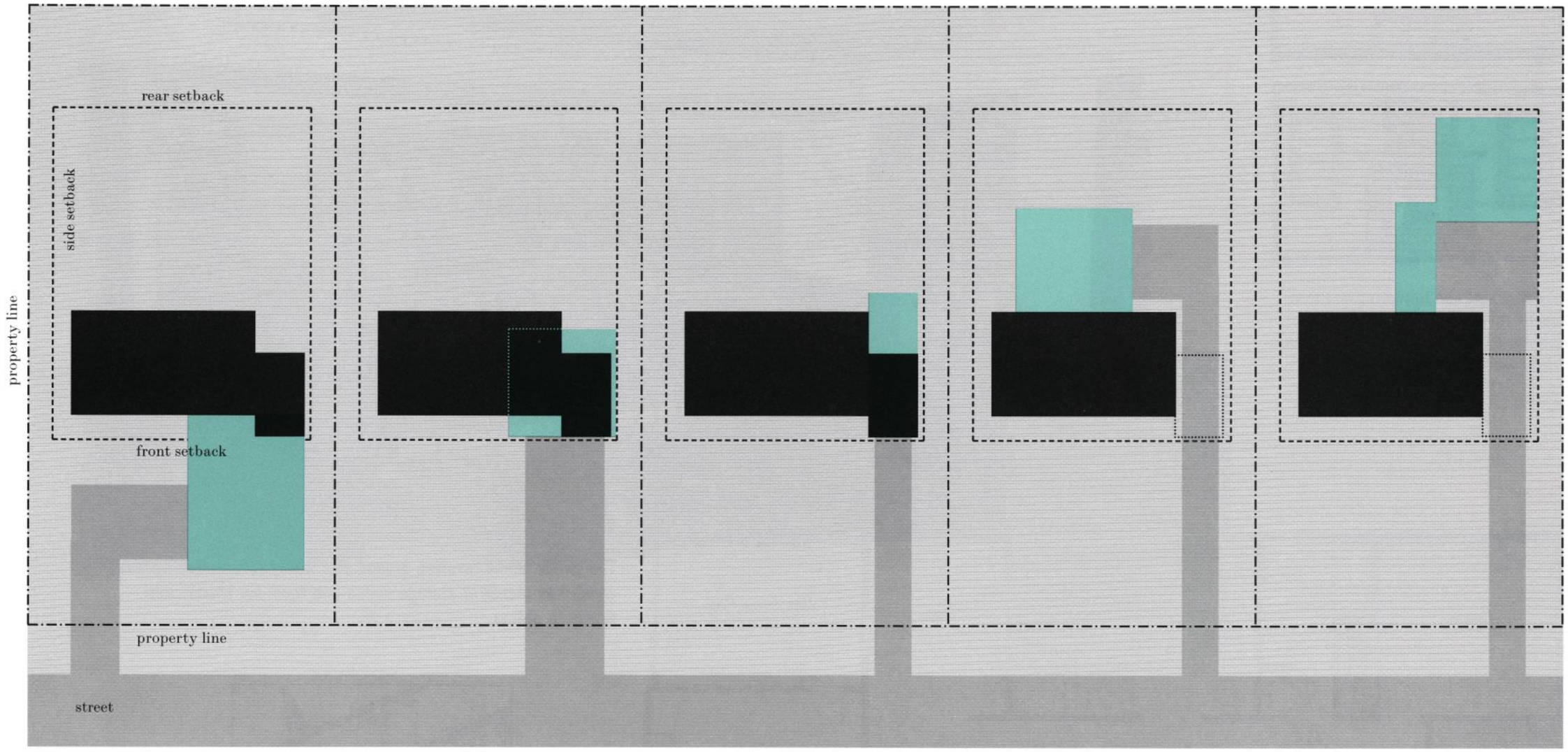
MAIN LEVEL



Positioning a closet here creates a separate entrance to the house so people don't have to walk through the shoe clutter to get to the kitchen.

Add a Garage Stall!

Expanding the garage from a one-car attached to a two-car garage–whether attached or detached–is a struggle. It is also the biggest obstacle for the Duffeys committing to any other remodeling projects in this location, for even if they invest heavily, the house will still be valued as having a one-car garage. Since there is no single solution to this dilemma, we're showing a range of nine different ideas. The key problem is that the house is built to within a few feet of the side-yard setbacks, leaving no room to expand laterally. For the Duffeys there are few options. For your house, solutions will vary depending on the width of your lot and existing setbacks.



Front Attached

Adding a side-loaded garage on the front of the house creates a wonderful hard-surface courtyard in front and leaves the backyard wide open for recreation.

However, since the garage violates the front yard setback, it would currently be illegal to build. It also hides the house from the street, and violates the strong suburban pattern of having wide-open front yards.

Side Expansion

Adding a second stall on the front of the house puts the garage where it's most convenient: right next to the kitchen. It also leaves the backyard untouched.

Unfortunately, the Duffeys would have to demolish their living room, dining room and fireplace to expand the garage. It would be an extremely expensive project for the value added. It also changes the neighborhood by making the street feel more dominated by cars than people.

Side Shotgun

Extending the current garage far enough to park a second car bumper-to-bumper is simple construction and extremely cost-effective. It also leaves the look of the house unaltered while making a legal 2-stall garage.

But stacking cars end-to-end is extremely inconvenient. No one wants to constantly shuffle two cars. Extending the garage the length of the house also blocks the Duffeys' only southern exposure.

Rear Attached

Tearing off the existing garage and extending the driveway around to a new two-stall garage attached to the rear of the house eliminates the street view of the garage and allows one to walk straight from the garage into the kitchen.

However, the little backyard that isn't paved over is utterly divorced from the house and is functionally useless. Also, the garage cuts off light into the entire east side of the house. Also, eliminating the existing garage is a huge waste of money.

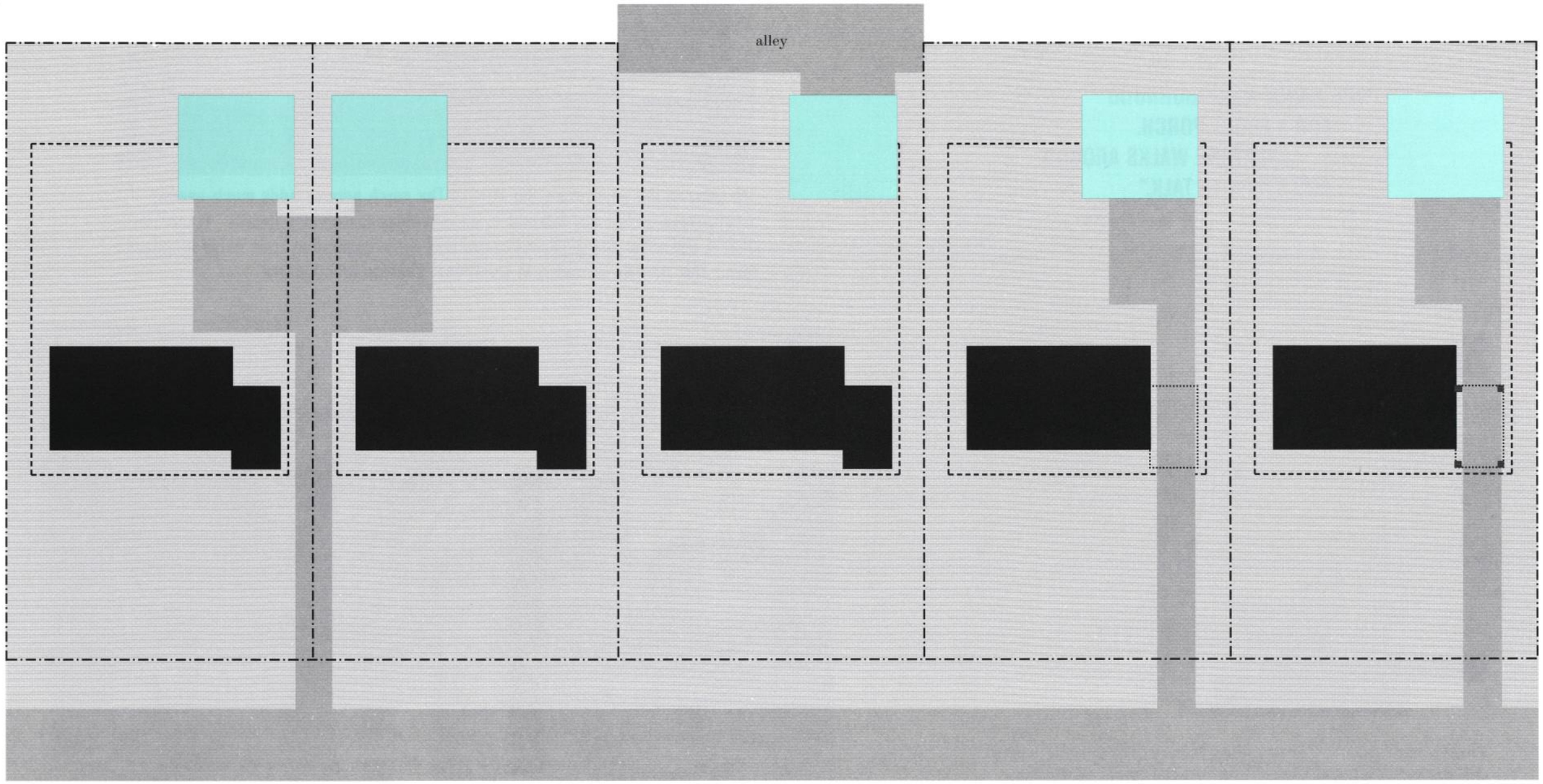
Rear Semi-Detached

Detaching the garage and building a breezeway to the house opens the house to the yard and east light.

At the same time, that would mean that most of the lot is paved (imagine the shoveling!), and again, destroying the existing garage is not financially wise.

"WE TALK ABOUT PUTTING THE BEDROOMS UPSTAIRS AND MOVING WALLS, BUT WE WOULD STILL ONLY HAVE A PLACE FOR ONE CAR."

– Pam Duffey



Rear Detached with Shared Driveway

Neighbors could pool their side-yard setbacks and build a shared driveway leading back to separate detached garages on the rear lot line. The existing garage could either remain as a third stall or be finished off as interior space.

Of course, neighbors would have to cooperate and collaborate not only on construction, but also on ongoing driveway maintenance and snow removal. Also, a detached garage is generally less convenient than an attached garage, though it is healthier.

Rear Detached with Alley

If the block had an alley, it would be a breeze to access a detached double-stall garage without destroying either the front or rear yards.

Unfortunately, few suburbs allow alleys, so this will only apply in a few cases.

Rear Detached with Front Driveway

The Duffeys could build a detached rear garage if they demolished the existing garage. This would open up the living room and dining room to lots of southern light.

Once again the driveway chews up most of both yards, and someone has to swallow the cost and commit to tearing the existing garage down.

Rear Detached with Carport

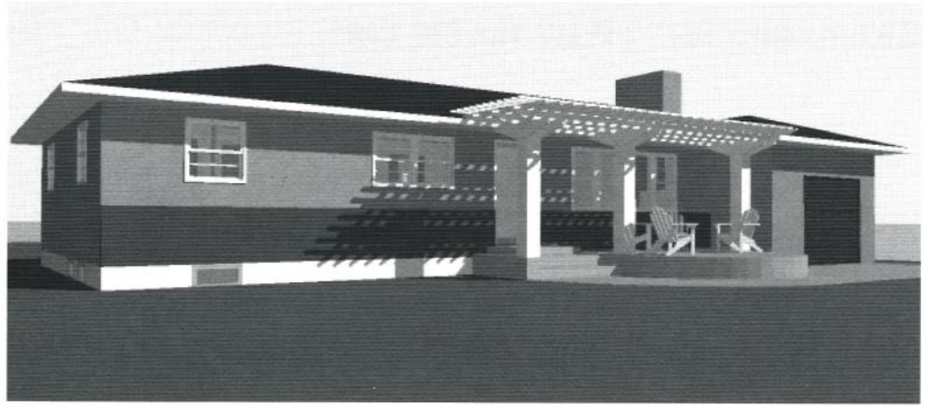
Simply adding a rear garage door to the existing garage creates a drive-through *porte-cochère* to the new two-stall detached garage in back. The existing garage could be used for wall-hung storage or as a garage.

The drive-through garage creates a potentially inconvenient shotgun-like situation of having to shuffle cars, and the Duffeys would have to lose their pool.

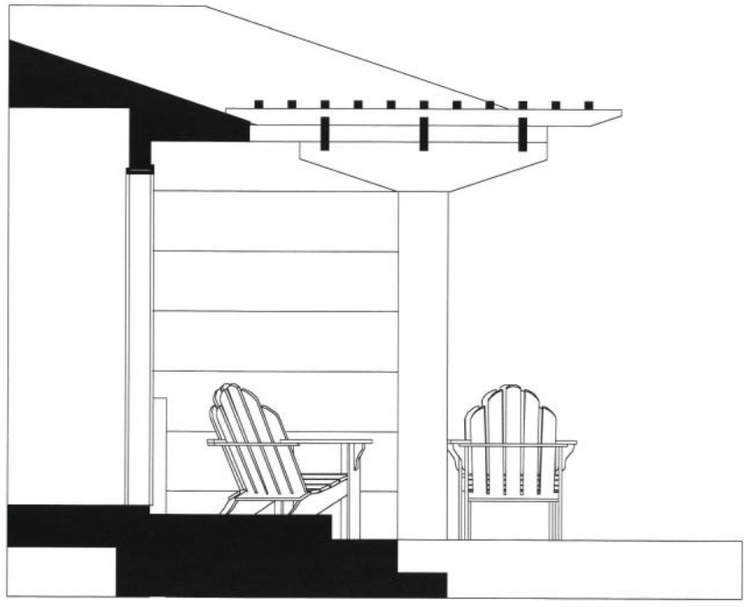
Add a Front Porch!

"IT'S A NICE NEIGHBORHOOD FOR A FRONT PORCH. EVERYONE WALKS AROUND AND STOPS TO TALK."

– Jack Duffey

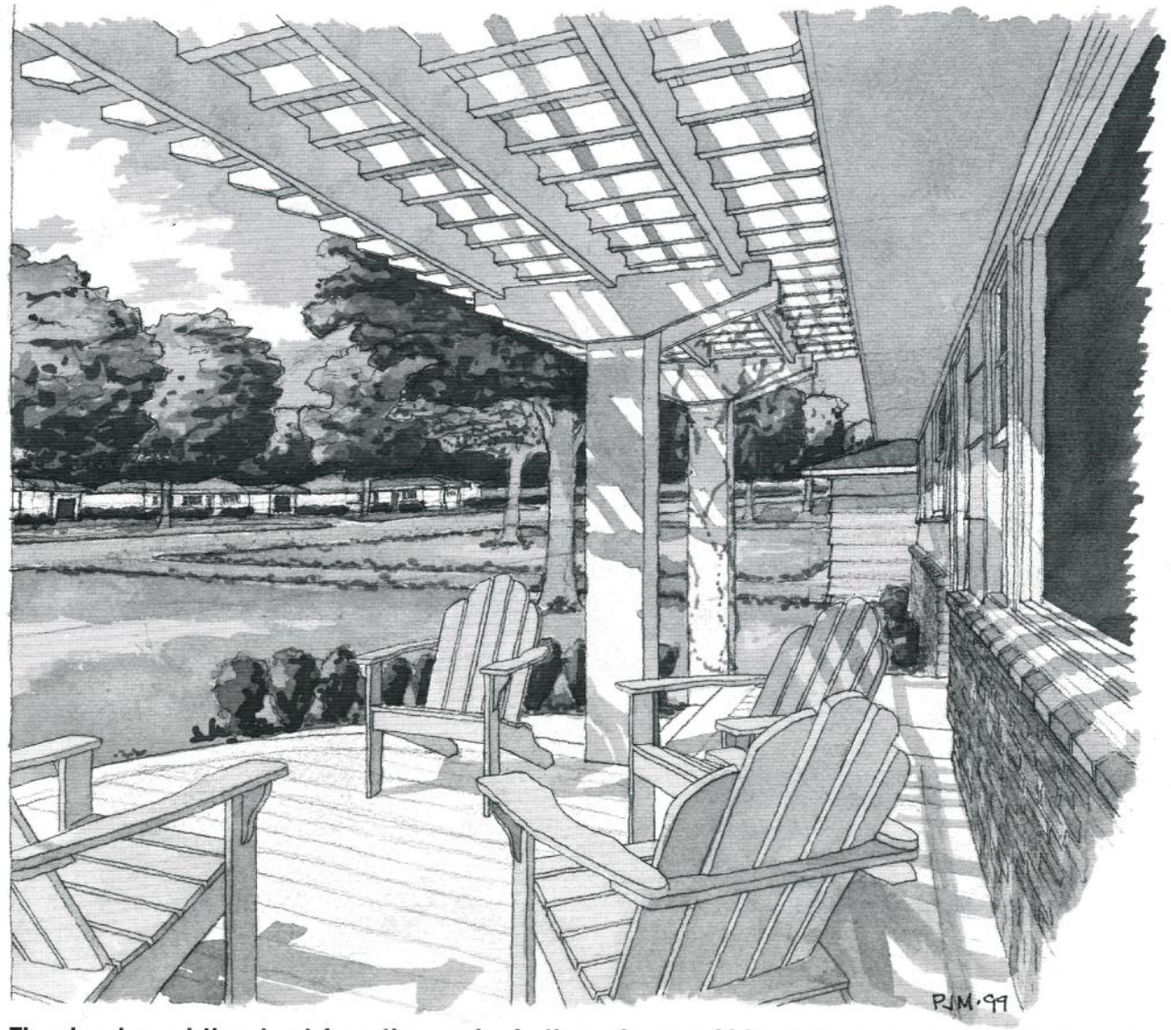


The view of the porch from the street. The porch pergola adds much-needed architectural detail and interest to an otherwise featureless facade. Frank Lloyd Wright and other Prairie School architects drew inspiration from Asian architecture. This pergola is rooted in traditional Chinese architecture.



This rather unusual free-standing front porch pergola leaves the gutter intact and the roof untouched, while at the same time shading the big west-facing picture windows from late afternoon sun and creating a pleasant place to hang out.

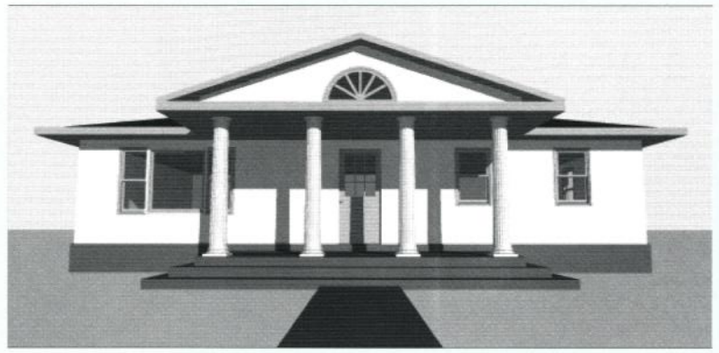
SQUARE FOOTAGE:	
Front Porch	208



The view toward the street from the porch. In time, vines could be trained to grow over the pergola.

Keep in Mind

KEEPING IN STYLE



Nothing destroys a house faster than an addition that is out of character. Don't inflict your Gone With the Wind fantasies on a poor simple rambler! A Tara-like grand portico will only look out-of-place and silly.

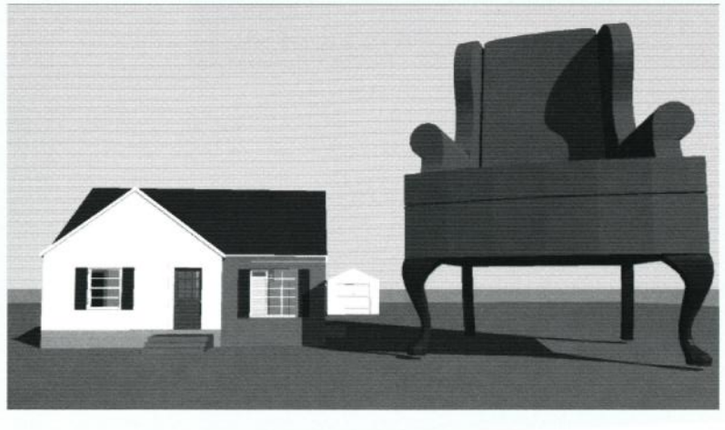
In contrast, respecting the house's existing qualities—however faint they may seem—and building on the house's strengths will make for a stronger whole.

A rambler is long, low and horizontal. Any addition should echo its roof pitch, window proportions and type, materials, color, details, etc. Ultimately a house that is remodeled in the appropriate style will be more valuable.

STORAGE

Any room with too much stuff in it feels small. To make a room feel instantly larger, winnow out some of the stuff. You'll be amazed at the difference.

SCALE

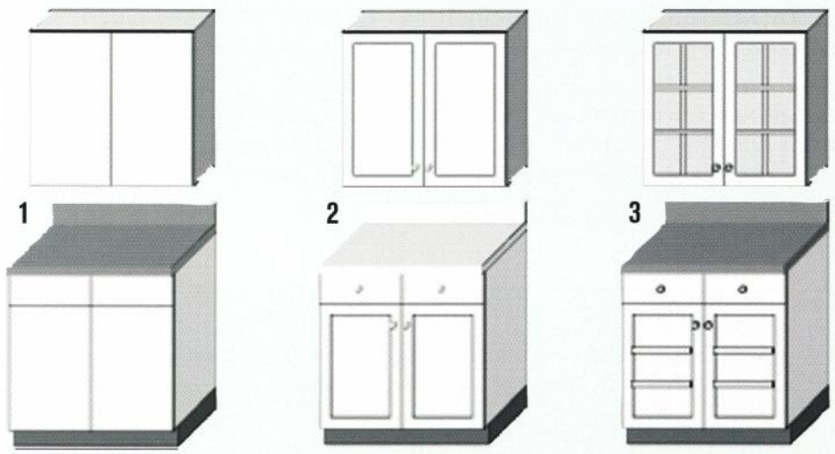


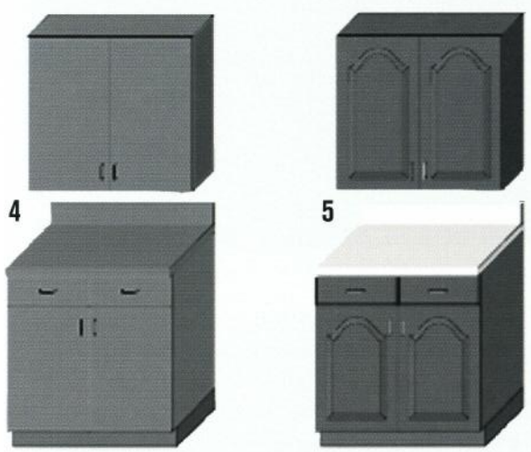
Furniture and appliances have grown in scale in recent years as houses have ballooned in size. In the 1950s, Coke came in 10 oz. bottles. Today Coke is typically bought in 2-liter jugs. Multiply this increase in scale times the hundreds of consumer items in a house, and you quickly see why the post-war houses feel so small. It's not that the houses have gotten smaller but that everything else has gotten so much bigger.

The simplest, easiest and least expensive route to making your house feel larger is to consciously shop for furniture, appliances, containers, etc. that are in scale with your smaller house.

Keep in Mind

CABINETRY



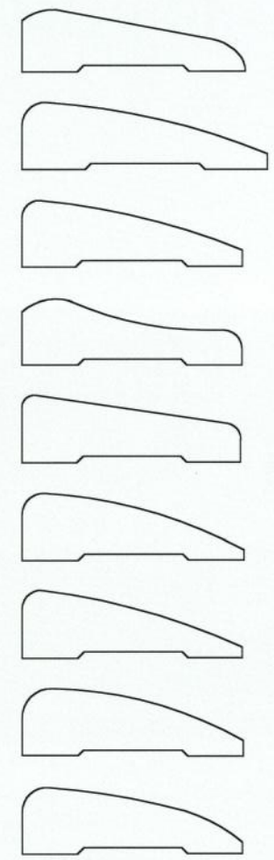


The original cabinets in most ramblers and Cape Cods were simple plywood boxes with plastic laminate counters (1). Beauty was in the wood itself (often just finished with wax, per Frank Lloyd Wright's instructions), not in fancy geometry. In updating post-war kitchens, keeping it simple is the best strategy. Simple "Shaker" cabinets work well (2) as do cabinets with muntins (3) that echo the house's windows. Plywood can be dressed up with paint (4). Avoid cabinet styles which are overly fussy and non-linear (5).

COLOR

Our collective memory of the 1950s is based on black & white TV shows, so it's surprising to see how colorful the 1950s actually were. Historical color collections, such as the Sherwin Williams "Preservation Palette," manufacture reproductions of the original period colors. Paint is cheap. Be bold. Experiment and have fun.

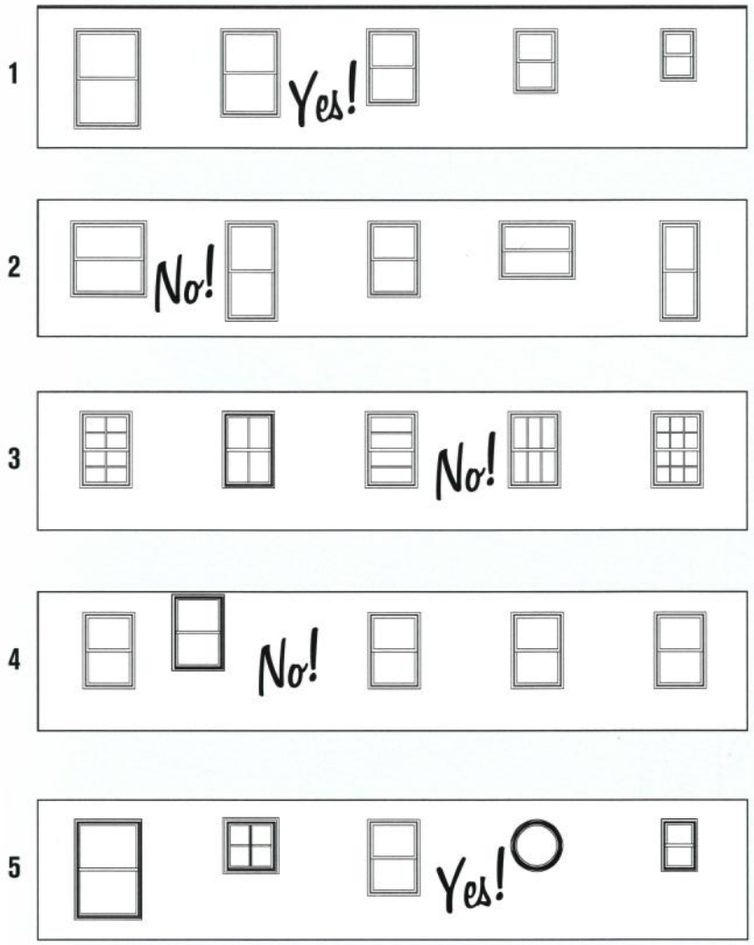
WOODWORK



The postwar period, to put it politely, was not know for its rich woodwork. The Wood Moulding & Millwork Producer's Association lists ten different Ranch-style profiles for window casings. Doors were flush, cabinets were plywood... Frank Lloyd Wright said "interior trim is no longer necessary" and builders took him at his word. Look for architectural excitement elsewhere.

Keep in Mind

WINDOW PROPORTIONS

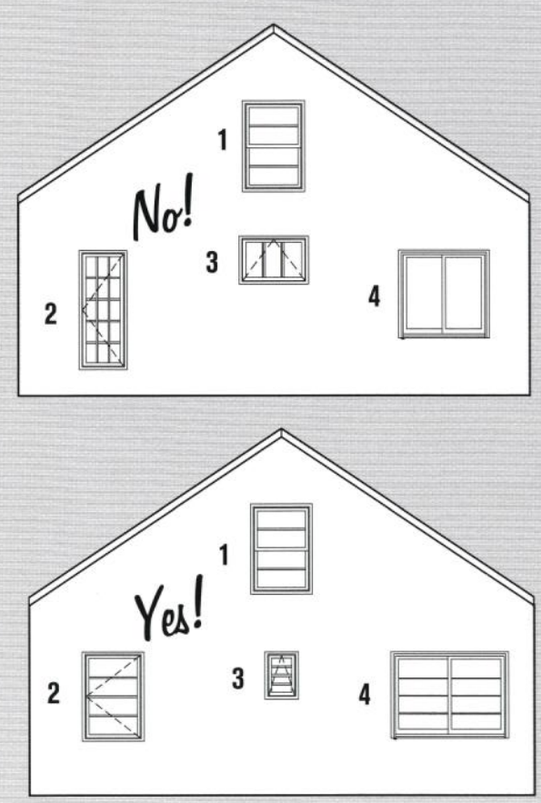


Repeating basic proportions (1) keeps the elevation harmonious. Ignoring proportions (2) leads to a chaotic look. Repeat the same muntin (or mullion) patterns wherever possible (3). One window doing its own thing (4) can throw an entire elevation off balance. Occasional accent windows (5) can spice up an otherwise bland exterior.

To compare window proportions, divide the window width by its height. For the example in (1), divide 2'-4" by 4'-8" = .66. Windows with the same dividend will have the same proportions.

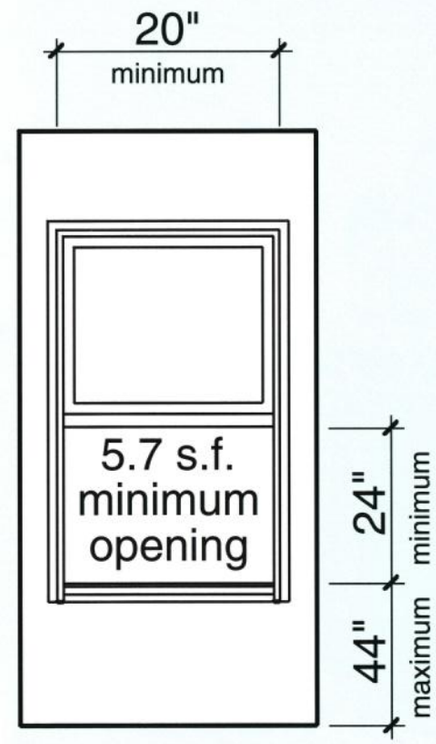
Don't forget to match the trim on your existing windows! Most houses from this era were installed with 1 1/2" exterior "brick mould" casing. It's tempting to install many contemporary aluminum-clad and vinyl-clad windows without trim to save money, but don't. Your house will look silly, and in the long run it won't maintain its value nearly as well as if you make the extra effort to match the existing window trim.

WINDOW TYPES

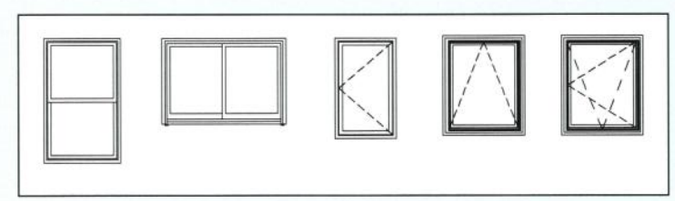


Mixing window types such as double-hungs (1), casements (2), awnings (3) and sliders (4) is the quickest single way to destroy a house's style (top). If you must mix window types, perhaps to meet legal egress code, then be extra careful that the proportions are harmonious (bottom).

WINDOW EGRESS CODE



A bedroom egress window must meet these minimum size requirements (above). These seemingly random sizes are large enough for a firefighter wearing an oxygen tank to crawl through. All new bedrooms must have a legal egress window, and if a bedroom is substantially remodeled it will usually need a legal egress window added. Check with your local building division.



double-hung glider casement awning tilt-turn

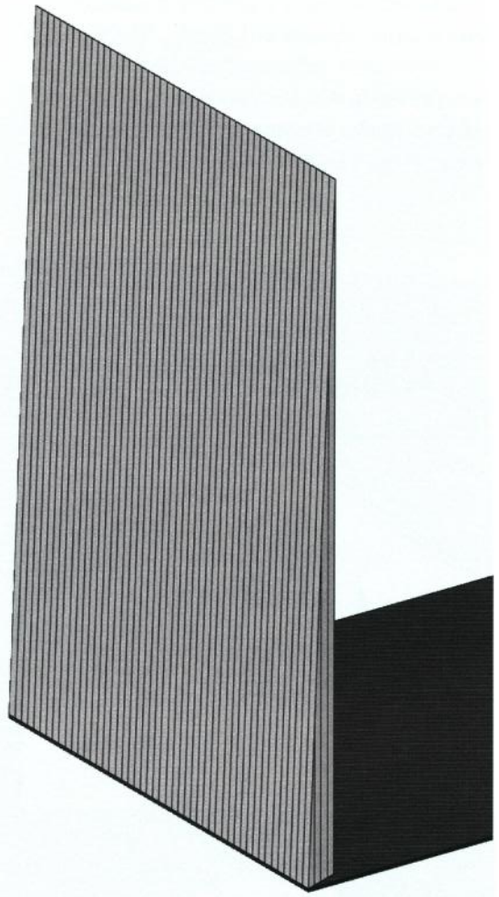
These are the minimum sizes that meet legal egress requirements for a variety of window types. Note that only a handful of manufacturers make the egress awning windows or the tilt-turn.

Keep in Mind

MECHANICALS

Most of the original mechanical systems are at the end of their useful life and need to be replaced. Replacing the furnace, water heater, etc. raises some opportunities. Most new furnaces and water heaters are high-efficiency and can be vented directly out the foundation wall. Gone are chimneys rising vertically through the house.

SIDING



Almost all post-war houses were sided with 18" "machine" cedar shakes. The "machine" refers to their grooves or striations on the surface. Most often installed grooves-out with 11" of the shingle exposed, these were almost always painted.

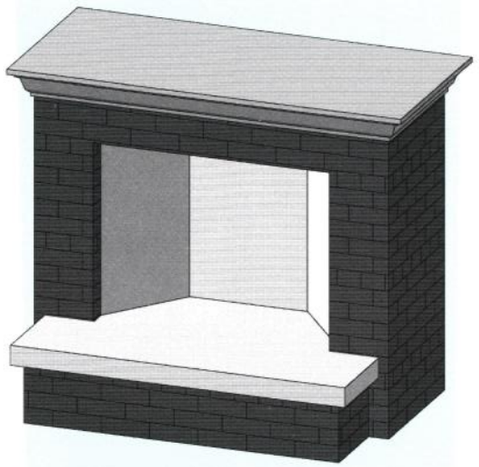
HEALTHY HOUSE

Many people are startled to learn that air inside their homes is far more polluted than air outside their homes. Plastics, carpeting, cabinetry and consumer goods all "outgas," or give off a steady stream of chemicals into the airspace, automobile fumes seep into the home, and furnaces and water heaters give off potentially toxic fumes.

A "healthy house" gets these chemicals out of your home's airspace, either through mechanical ventilation or through air leaking in around doors and windows.

Homes built in the post-war era are typically not very "tight," and fresh outside air creeps in through leaky windows and doors. But as you replace windows and weatherstrip doors to save energy, you will need to be conscious about exchanging stale indoor air for fresh outdoor air.

FIREPLACE CODES



The hearth material must be non-combustible. If the fireplace box has an opening greater than 6 s.f. then the hearth needs to extend a minimum of 20" in front of the firebox and a minimum of 12" to the side. If the fireplace box has an opening less than 6 s.f. then the hearth needs to extend a minimum of 12" from the face of the firebox and a minimum of 8" from the side.

No combustible materials can be within 6" of the firebox on the sides. Above the firebox, combustible materials may extend 1/8" for every 1" of rise to a height of 12". (In other words, a wood mantel should come no closer than 12" to the top of the firebox.)

ENERGY CODES

BLOWING WOOLS:	(R)
approximately 3"	9.00
approximately 4 1/2"	13.00
approximately 6 1/4"	19.00
approximately 7 1/4"	24.00
approximately 14"	30.00
approximately 18"	40.00
INSULATION:	
fiberglass 2 3/4"	7.00
fiberglass 3 1/2"	11.00
fiberglass 3 5/8"	13.00
fiberglass 6"	19.00
fiberglass 9"	30.00
fiberglass 12"	38.00
cellulose 8"	29.00
cellulose 10"	37.00
cellulose 12"	44.00
thermax 1 1/2"	12.00
thermax 2"	16.00
CONCRETE BLOCK:	
concrete block 8"	1.11
concrete block 12"	1.28

As of July 20, 1999 Minnesota will begin enforcing a new and stricter energy code. Extensive information about the energy code and other energy issues such as ice dams can be found on the Minnesota Department of Public Service's web site:
www.dpsv.state.mn.us/docs/infocntr/infomain.htm
Some components to be aware of:

- if you are adding onto a house, you have three choices for how to comply with the state energy code: 1) the addition alone can meet current requirements, 2) the addition together with the entire existing building can comply with current requirements, or 3) you can make energy improvements to the existing structure which combined with the addition will meet current requirements.

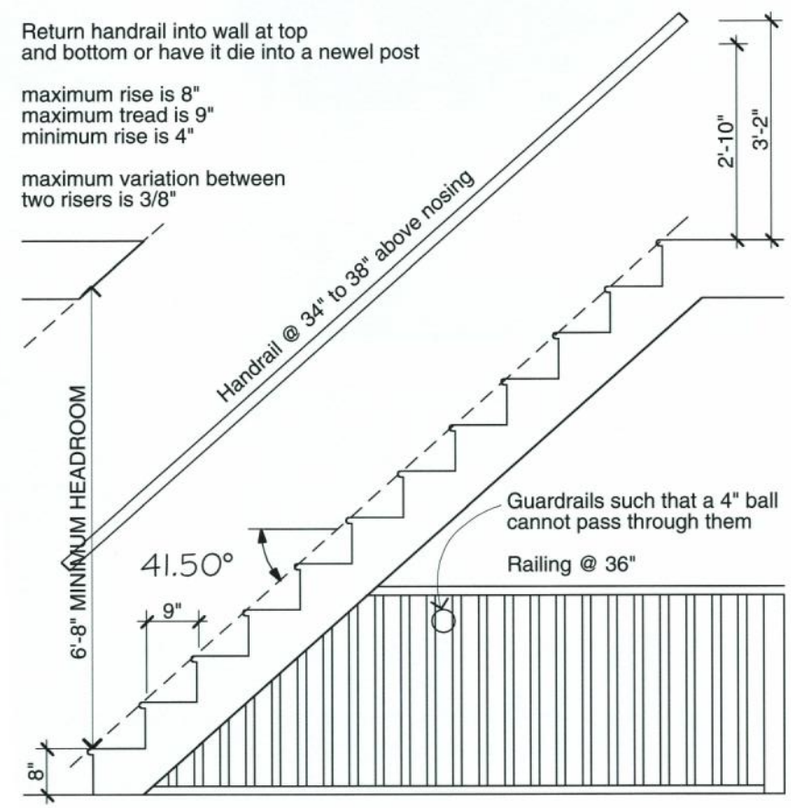
- attic insulation may not be installed unless accessible attic bypasses have been sealed.

- when an uninsulated attic is finished, the insulation at the sloped ceiling cavity must not be less than R-18.

- windows that are replaced—but not windows that are repaired—must meet current requirements.

- interior wall finish may not be replaced unless wall cavities have been insulated to full depth.

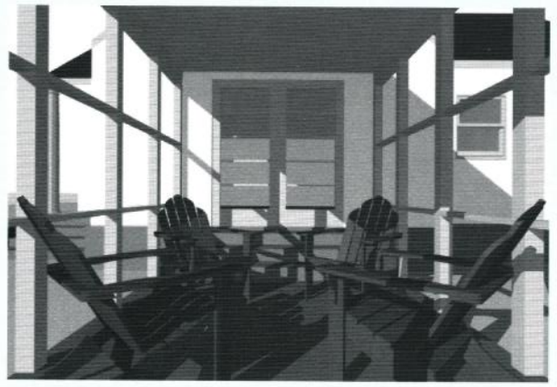
STAIR CODES



Stairs are dangerous. Maximum stair rises and minimum treads (and hence the 41.5-degree angle) are to prevent people from stumbling. The 4" ball rule is to prevent babies from twisting their heads between balusters and suffocating. Handrails (which should be 1 1/2" to 2" round for an easy grip) catch people who are falling. Guardrails prevent kids from falling into stairwells. Stair codes are not negotiable.

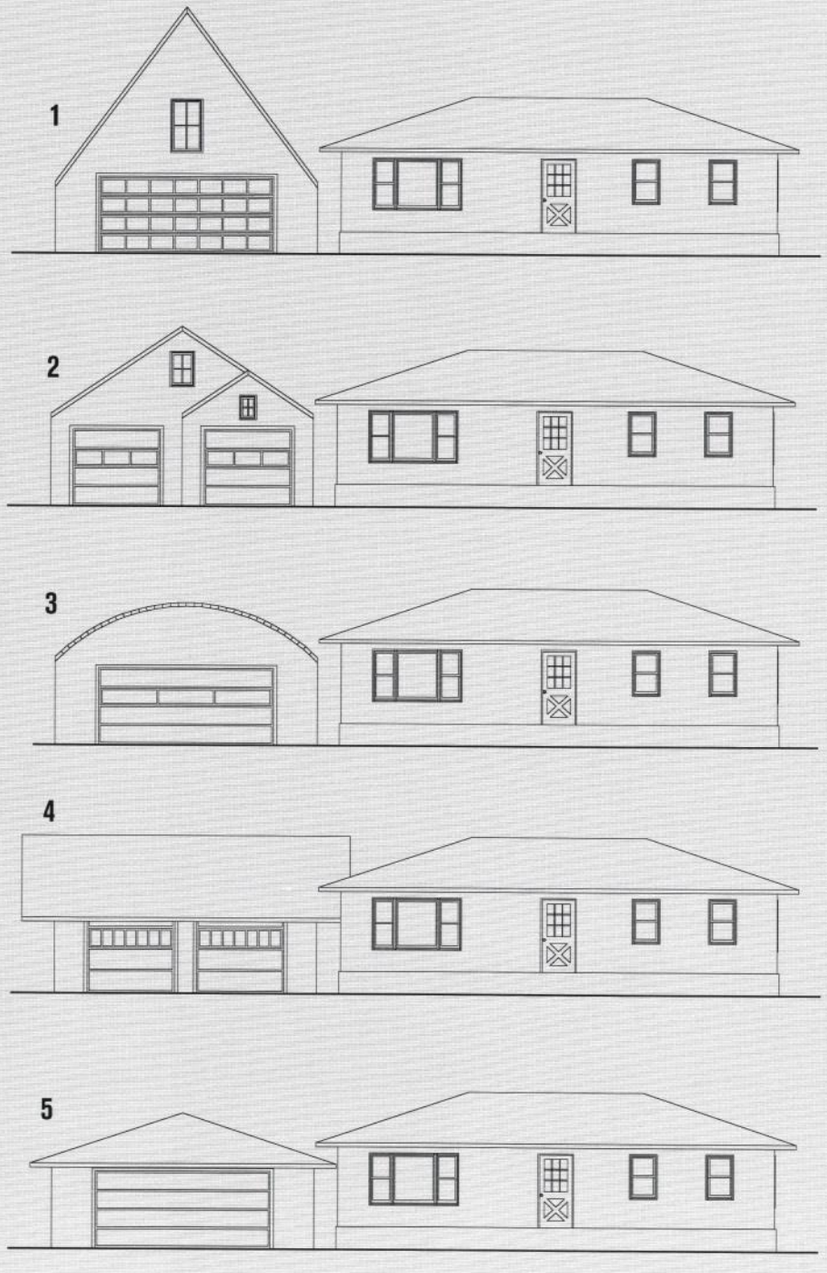
Keep in Mind

EXTEND LIVING SPACE OUT



The cheapest way to extend your living space is to add on outdoor rooms—screen porches, front porches, patios and decks. While they can't be used year-round, they cost a fraction of heated, insulated space.

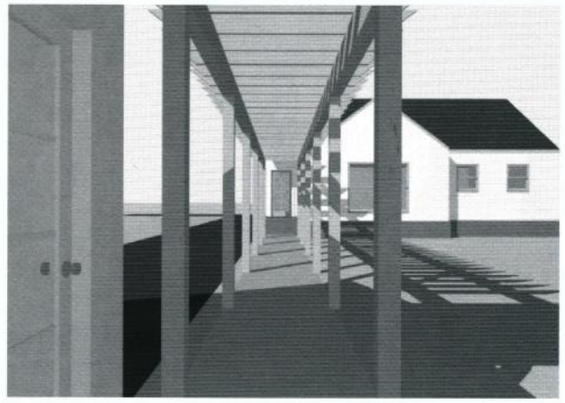
DETACHED GARAGE STYLE



The Cape Cods and detached ramblers were typically built with garages as an option. Many homeowners opted to save money up-front and add the garage later. Wherever possible, match the garage style to the house style using such key indicators as roof pitch (1), scale and details (2), geometry (3), and overhang depth and details (4). A garage that matches its house feels "just right" (5).

Note that a newly built garage may be quite beautiful by itself, but still not work with the existing house style.

CONNECTING A DETACHED GARAGE



Minnesotans have been trained for two generations that garages have to be attached. But recent studies have discovered that an astounding amount of toxic fumes enter the house's airspace through attached garages, potentially giving detached garages a health advantage.

If you do have a detached garage, here are some simple ideas for making it easier to live with:
1) make certain that you have a drop-off point on the driveway to unload heavy loads such as groceries directly into the kitchen.
2) make certain that both the entrance to the garage and the entrance to the house are protected from the rain by overhangs so you don't get soaked while fumbling for your keys.
3.) a pergola connecting the garage to the house (above) can transform a utilitarian passage into a garden stroll.