

Bungalow Rebirth

Modernizing two Austin bungalows required creative sensitivity to historic neighborhoods

BY STEWART DAVIS AND JAY SCHAFFER

Respecting historic neighborhoods, meeting strict building codes, and accomplishing clients' goals are integral to our work at CG&S Design-Build in Austin, Texas. For 60 years, we have specialized in restoring, renovating, and remodeling dozens of bungalows in the city's oldest neighborhoods, including Hyde Park, Zilker, and Clarksville. Nearly every home in these neighborhoods, which were once outside the central downtown hub, dates to the mid-20th century, and many have historic protections.

Bungalows are a native Austin building type and a standard project for us. They are characterized by fully defined closed-off rooms oriented in a left-right division of public and private space (vs. front to back). Typically found in neighborhoods with small lots, bungalows are always one story and include two bedrooms and one bath, making them ideal starter homes. Many are considered heritage homes—defined as houses that are at least 75 years old—but unfortunately, in decades past, they have been demolished regularly in favor of new builds with much larger footprints.

However, the Residential Design and Compatibility Standards, commonly called the McMansion Ordinance, were introduced in 2006 to protect the scale and character of these neighborhoods. Prior to the adoption of the standards, countless cottages and bungalows were torn down to make way for three-story homes that were decidedly unfriendly to their neighbors. The McMansion Ordinance ties a home's allowable square footage to the lot size and restricts its physical form to a more human scale.

But with the constraints come challenges. The two projects shown here illustrate our approach to building in Austin, with its historic



limitations, zoning restrictions, and region-specific issues, but the lessons are applicable across the country. The first project, “Craftsman Revived,” involved nearly tripling the size of the house while maintaining a modestly scaled street presence, while the “Zilker Cottage” remodel included building additions around an immovable obstacle—a protected pecan tree.

The best design comes from constraint

It's not uncommon for the impervious ground surfaces—those that don't absorb water—at an existing Austin property to be at or over the maximum allowable percentage, which is typically 45%. That means expanding will require building up rather than out—an



CASE STUDY NO. 1

CRAFTSMAN REVIVED

Our goal was to substantially enlarge this house while making it fit in with its modestly scaled neighborhood. The new build needed to accommodate four bedrooms, three bathrooms, three living rooms, and a covered porch. Our strategy was to site the main section above the front porch, but we pushed it back to the original ridge of the house to reduce the scale. The secondary mass, which houses the kids' bedrooms and a carport, was pushed farther back and sits lower than the main section. This is a way of modulating the scale of a bigger remodel—we build new elements to look as if they were added *(continued on p. 58)*



CRAFTSMAN REVIVED

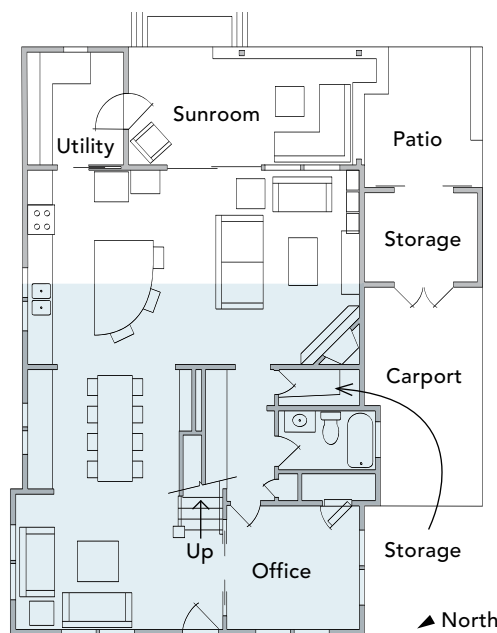
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on over time. We were subject to the McMansion Ordinance, which played a big part in the massing of the house. The fact that the main gable faces forward is a direct reflection of the ordinance's requirements. Initially, we had the gable running north-south.

Though well built, the original structure had been compromised by a shifting foundation, so we exposed the floor framing down to the joists and beams, and tweaked the level of the joists where they would meet new framing. Similarly, we took the existing walls down to the studs to run new wiring and add insulation. We also did a fair amount of structural foundation work—replacing wood posts with concrete and tying the new slab foundation to the existing pier-and-beam foundation.

The trim had to be rebuilt; we used fiber cement for the frieze trim and a vinyl water-table trim. This treatment was repeated above the second-story windows, since trim molding of random lengths is typical for the era in which the house was built. It's difficult to install old-school wood screens with modern windows; we modified both so that the windows could be installed in a traditional manner with nailing flanges.

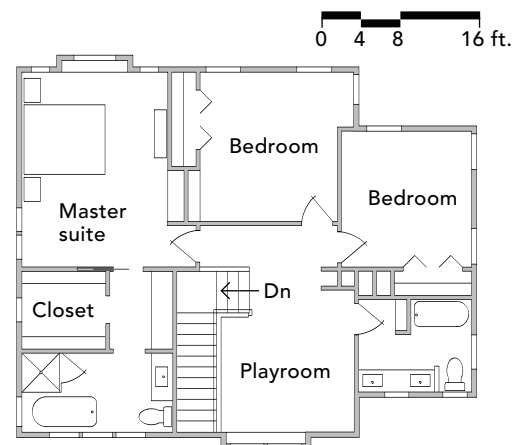
Designing the carport was a puzzle. Because the original house was built so close to the setback, the new carport needed to be very narrow. As a result, pulling in meant the driver's door would open into the side of the house. Backing in allows the door to open into the unpaved, uncovered setback—an acceptable compromise.



First floor

BUILDING ON A BUNGALOW

The expansion of the first floor (the original floor area is tinted at left) and the addition of a second level nearly tripled the volume of interior space. The first floor is now more contemporary and open, and it accommodates new outdoor living spaces.



Second floor



Whole-floor makeover. To accommodate the family of seven, the home's footprint was expanded by 427 sq. ft. on the first level, and a new 1156-sq.-ft. second floor was added. The open concept creates a continuous flow from the living room through the dining area and into the kitchen, where Caesarstone counters, white cabinetry, and pops of color create a bright, fresh feel.

approach that preserves green space and often gives the second floor a tree-house feel. The goal is to maintain the proportion, scale, and components of the original design. Floor-area maximums are quickly reached on small inner-city lots, which presents both a challenge and an opportunity to design extremely efficient spaces, tailor-made for each family.

Then there are the underbuilt areas. Many of Austin's older homes lack outdoor living areas and support spaces, such as pantries and mudrooms. We routinely add areas for outdoor dining and socializing and then connect those spaces to their interior counterparts using generous window walls or oversize patio doors for maximum transparency, flow, and a feeling of spaciousness. We also either add or repurpose existing square footage to get high-functioning support spaces. For example, we will create a mudroom/back-kitchen combination around the corner from the main kitchen to serve as a pantry to house cookware, small appliances, a second refrigerator, and bulk items; it can also be used as a drop zone for the kids and a command center for the adults. By doing this, we address a common problem with Austin's older homes: The living spaces and master bedrooms are too big, and the support spaces are too small.

We also believe in aligning preservation and modernization. One technique we use involves what we call a "modernization gradient," whereby we defer to period architecture at the start of the gradient: the street-level approach and front entrance to the public rooms. Then we progress to more-modern design elements and materials as we move into private parts of the house and back to the outdoor living spaces. This is an excellent way to respect historic neighborhoods without sacrificing the convenience of life in a modern home.

Codes and materials for a desert climate

Since most of Austin's bungalows were built before air-conditioning, walls are often either uninsulated or have an R-value of R-11. There



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Combining elements. The main-level floor plan is not historically accurate, but the clients wanted an open plan for the living room, dining room, kitchen, and family room. The stair is sited near the entry—as in many historic houses—to preserve an existing bedroom at the front of the house.

CASE STUDY NO. 2

ZILKER COTTAGE

We paid close attention to keeping the 1940s character of this house intact despite the extensive structural work required to turn it from a two-bedroom/one-bath home into one accommodating a master suite and two bedrooms for the kids. To maintain the bungalow feel, an existing dormer on the front facade was duplicated, and we specced round dormer vents. Details true to the period include Greek returns, porch columns, and interior transoms. The front porch was rebuilt entirely so that it extends beyond just the entryway but still maintains the look of the original, smaller porch.

We removed an unused side porch and built two new bedroom wings around a pecan tree protected by the Austin Tree Ordinance. We had to keep all structure out of the critical root zone, an 11-ft. radius. The new piers were placed outside of that zone, but some of the beams had to be cantilevered over the root zone, which required approval from a city arborist.

Because of the historic district, we needed to maintain the house's scale and respect the adjacent properties' rooflines and elevations to keep the house feeling connected to the neighborhood. Among other things, the windows needed to make historical sense, which meant they needed to be located correctly.



Expanding out and back. The front porch was completely rebuilt with a longer span. The new roof above the porch required special framing to match the curve of the existing roofline. Rafters were cut with a custom radius, and the metal roof was fitted to match.

have been many recent code changes—insulation-specific inspections are now required, and R-15 in walls and R-38 in attics is the standard. As a solution, we are moving toward using more spray foam—open-cell in walls and closed-cell in attics—for its excellent R-value per foot and because the increased insulation supports the downsizing of air-conditioning units. This is crucial in our climate, where a large air conditioner will cool a room and shut off again before it has removed enough humidity from the air to make the indoor spaces comfortable.

On the exterior, we have also come to prefer composites over PVC trim, which is prone to shrinkage with extreme temperature varia-

tions. For siding, fascias, and soffits, fiber cement holds up well. On the roofs, standing-seam and snap-lock metal roofing are the way to go—they are adaptable in tricky situations, plus the local historic commission prefers colored roofs, which is easy to satisfy with metal. □

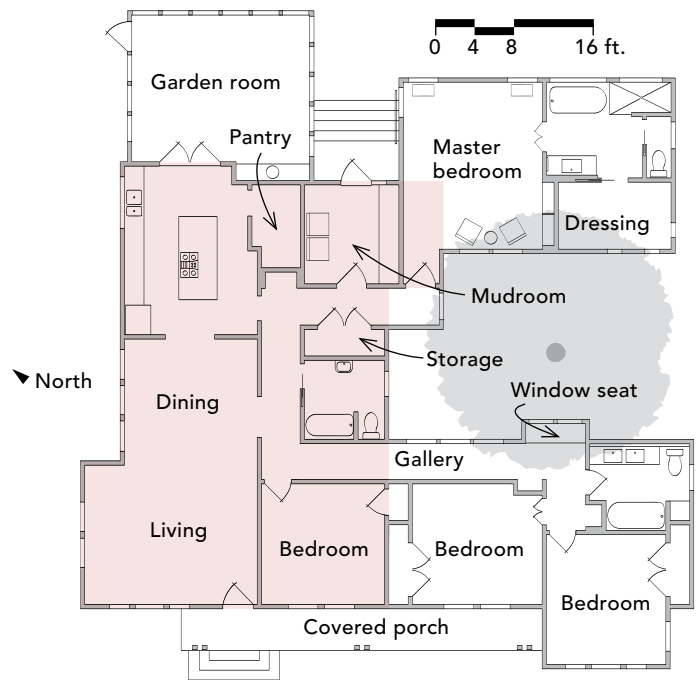
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Protecting the landscape. Per the Austin Tree Ordinance, a minimum number of piers were installed so as not to disturb the tree roots, and structural beams were upsized to withstand the load of the wider spans.

NEW SHAPE SOLUTION

With an increase of 1056 sq. ft. (the original floor area is tinted below), the new floor plan incorporates a private master suite, while the H-shape configuration provides courtyard views of a city-protected pecan tree.



Created for kids. In the children's wing, a window seat/reading nook offers a view to the preserved pecan tree. The use of shiplap paneling visually breaks up the long hallway, and the bedrooms are roomy with plenty of natural light from double-hung windows.



Private and peaceful. The master suite features a vaulted wood ceiling, sitting area, and built-in bookshelves. The bathroom is configured with a spa tub, roll-in shower, and large dressing area. Details include decorative niches and a curved shower seat that also acts as the tub deck.

