

Inside: Brian Van Bower on Material Options

# WATER SHAPES

Design • Engineering • Construction

Volume 3  
Number 9  
November/December 2001  
\$5.00

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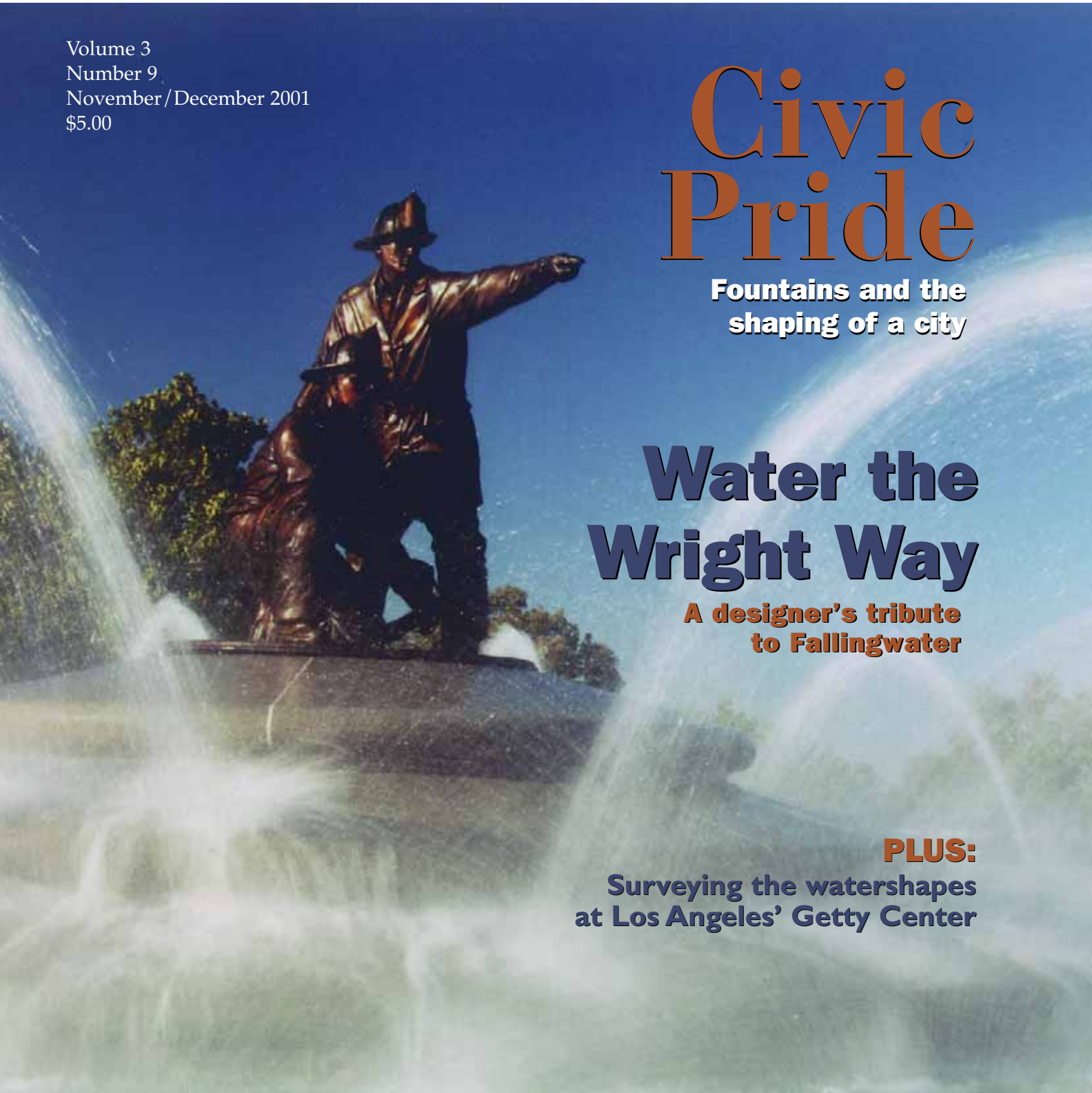
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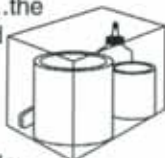


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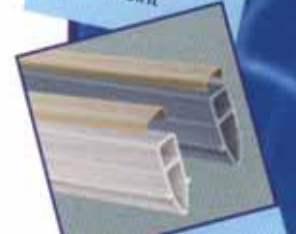
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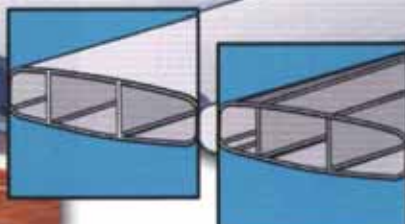


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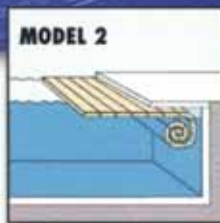


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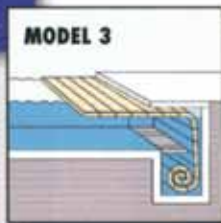
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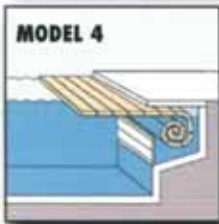
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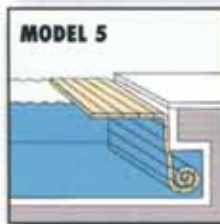
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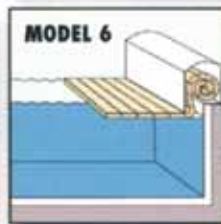
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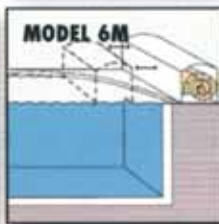
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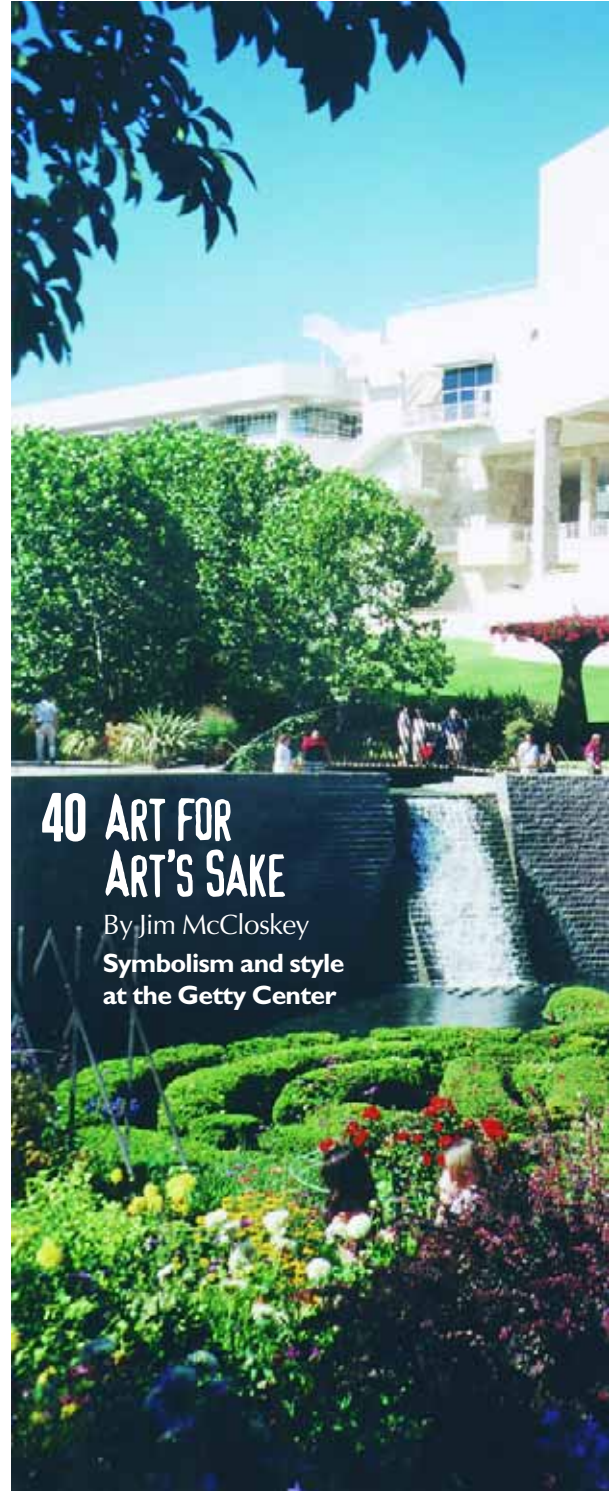
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On the cover:

Photo courtesy City Fountains Foundation,  
Kansas City, Mo.

WATERSHAPES (ISSN 1522-6581) is published monthly with combined issues January/February, July/August and November/December by McCloskey Communications, Inc. 6119 Lockhurst Dr., Woodland Hills, CA 91367. A controlled circulation publication. *WaterShapes* is distributed without charge to qualified subscribers. Non-qualified subscription rates in the U.S., \$30 per year; Canada and Mexico \$48 per year; all other countries \$64 per year, payable in U.S. funds. Single copies \$10 per issue in the U.S. and Canada. All other countries \$15 per issue. Subscription requests must include name, job title, business location, address information and a signature and date.

**POSTMASTER: Send address changes to *WaterShapes*, P.O. Box 1216, Lowell, MA 01853-9930.**

Periodicals postage rates paid at Woodland Hills, CA 91365 and additional mailing offices.



## Monuments in Water

Throughout recorded history, great societies have built monuments to celebrate their victories, commemorate their tragedies and express their guiding ideals. To this day, we continue to create monuments to remind us of the sacrifices and achievements others have made to forge the world in which we live. Monuments inspire courage, fortitude, inventiveness, wisdom and compassion. They serve as emblems that provoke us to meaningful reflection, appreciation, meditation and hope.

To be sure, monuments come in all shapes and sizes – from the imposing Taj Mahal to Maya Lin's intimate Vietnam War Memorial – but most can be placed in one of two basic categories: They are structures that commemorate a person, event or idea, or they are places preserved for their beauty, artistry or historic significance.

In both categories, we find monuments that make inspired use of broad sets of aesthetic ideas and artistic influences. We see the use of sculpture, painting, architecture, lighting, stonework, landscaping, inscription – and, in so many cases, the wondrous presence of still and/or moving water.

It is in monuments, in fact, that water assumes some of its greatest shapes. No matter the scope, type or scale of the monument, water's reflective qualities, compelling sounds and ever-changing appearance lend interest and meaning across a huge (and perhaps even infinite) spectrum of design concepts.

Given this potential for aquatic monumentality, we decided for our special Third Anniversary Issue to explore some of the most elevated and inventive applications of the watershaping arts to be found anywhere on the planet:

q Our journey begins in the heartland of America with a stop in Kansas City, the self-styled (and legitimately so) "City of Fountains." In this feature, watershape consultant Curt Straub describes the city's use of fountains as landmarks that both beautify the urban environment and lend the place much of its civic identity.

q Next, we head west to a spot near *WaterShapes*' home base in Southern California: The Getty Center. Here, publisher Jim McCloskey guides an imaginative tour of this spectacular facility, where water is used in various creative and inspirational ways to make distinctive artistic and symbolic statements.

q That piece is followed by an insightful discussion by watershaper and *WaterShapes* columnist David Tisherman of one of his favorite places: Frank Lloyd Wright's Fallingwater in Mill Run, Pa. Here, Tisherman explains how water, architecture and nature come together to create an awesome treasure of American architecture.

There are more examples of watershapes we had originally planned to include in this package, but they all proved so detailed that space would not allow us to cover them all with the depth we saw as necessary. So after much consideration, we decided to split the package in two – and you'll be treated to appreciations of three additional "Monuments of Watershaping" in our January 2002 issue.

Preparing these articles for print has been an exciting process, and we think you'll enjoy the pictorial journey we've invited you to take with us. We also hope you'll be inspired to hit the road to see some of these places and watershapes for yourselves.

They're all available for public viewing and represent work at a caliber that has made those who have written about them proud and happy to line up behind this simple statement: It is truly fantastic to work in a business capable of bringing this much wonder, joy and beauty to the world.



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**Curt Straub** has been active in the pool industry since 1962, when he joined his family's construction company as a laborer working on backyard installations in the greater Kansas City, Kan., area. In 1970, Straub moved into the front office and headed up the company's design and sales teams, a position he held until 1990, when he founded Aquatic Consultants. A specialist in pool and spa design, he offers mediation and conflict-resolution services along with his emphasis on structural evaluation. Straub is a longtime member of the American Concrete

Institute's Kansas Chapter and is past chairman of ACI's swimming pool committee. He is also a past board member of the Master Pools Guild.

**Jim McCloskey** is publisher of *WaterShapes* and president of McCloskey Communications, Inc., a Woodland Hills, Calif.-based producer of trade magazines. A 1977 graduate of the University of California at Los Angeles, he majored in English literature and minored in art history, with a focus on architecture. He began a career in magazine publishing in 1979 and from

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Interested in writing for WaterShapes on design, engineering or construction topics? Contact Eric Herman at (714) 449-1996!

1987 until 1996 was editor and associate publisher of a leading publication for the pool and spa industry. Through the years, he has started or guided the start of eight scientific and technical trade magazines, including *Architectural Lighting*, *Professional Refinishing* and *WaterShapes*.

**David Tisherman** owns and operates David Tisherman's Visuals in Manhattan Beach, Calif. A designer and builder of high-end custom swimming pools since 1979, he is widely known in the pool and spa industry as an advocate for the high-

est possible standards of design, engineering and construction. He has degrees and credentials in industrial design, scientific illustration and architectural drawing from Harvard University and Art Center School of Design and has taught architectural rendering and presentation at UCLA. An award-winning designer, he serves as an industry expert for California's Contractor State License Board and has been a member of NSPI's Builders Council since 1994. Tisherman is a co-founder of and principal instructor for the Genesis 3 Design Group.



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## Material Issues

Lately I've been finding myself in what seems like a fairly unique position: On the one hand, I work as a design consultant for architects and as a designer for high-end customers; on the other, I work as a builder executing the designs that customers and their architects choose.

In this dual capacity, I've been able to gather a tremendous amount of input from construction clients and transfer it in one form or another as a consultant. I also have had the opportunity of seeing how decisions made in the design process play out during the construction process.

Seeing both sides has led me to certain conclusions, chief among them being that clients are looking for more choices when it comes to selecting materials for their projects. In fact, I'd say that materials – more than any other element in watershape design and construction – enable both watershaper and client to elevate even the simplest of projects.

### Opening Up

Increasing these options is a two-step process: First, you have to educate yourself with respect to what's available out there – and there's no shortcut around doing your homework and accepting the fact that you sometimes must do a lot

**Clients are looking for more choices when it comes to selecting materials for their projects. In fact, I'd say that materials – more than any other element in watershape design and construction – enable both watershaper and client to elevate even the simplest of projects.**

of digging to get the information you need.

Second (and the topic of this particular discussion) is the need to use what you discover and communicate it to your clients. This may sound incredibly simple, but I've come to find in talking to all sorts of people in this business that communicating materials options is a bigger challenge than I would have thought.

The sad fact is that, as an industry – and especially the old-line pool and spa industry – we have been extremely slow to add new types of materials to our bags of tricks.

I remember a time when tile selections, for example, were all made for us by a relatively small handful of suppliers who carried a pretty narrow range of what were known as “swimming pool tiles” that didn't reflect at all the expansive world of available tiles. Their vision was limited, and so, as a consequence, was ours. And the tile folks weren't alone, because I could say the same thing about suppliers of coping, decking and interior surface materials.

As I grew as a watershaper, and especially as I became more involved in design work, I began to run into people who had worked with unusual materials (unusual to me and most pool people I knew, anyway) such as granite, tumbled marble, irregular stone and all sorts of different products from around the world. It didn't take long to recognize that I had been working with an *extremely* limited palette.

And when I began offering these newly discovered options to my clients, I soon discovered just how excited they could become about certain options.

Invariably, I found the things that they really liked were those things they hadn't been shown by other contractors. And it hit me: Offering



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this broader set of material options was a way to make my prospects happy, distinguish me from the competition, add value to the work and add distinction to the finished product.

Even in situations where clients stayed with more-familiar material selections, the simple task of making other things available had value in that my customers had choices and were satisfied that they

had seen a range of materials in making their selections.

### Pondering Pebbles

Just about the best case I can make for broadening the range of options clients are offered has to do with pebble or exposed-aggregate finishes.

We've all seen pebble surfaces, and it's no secret that they've caught on to become

among the most popular surface options going these days. I can remember just a few years ago, however, when that was not the case: Lots of people even scoffed at pebbles, saying the surface was too exotic, too expensive and too difficult to install. More important, the doubters thought there was no way that their clients would go for something so alien in appearance and texture.

Today, many of those same designers and contractors offer pebble surfaces.

The key here is that even when the client opts for regular plaster, it's empowering for both contractor *and* client to weigh the option. And the fact is we're still seeing the effects of a real revolution in pool finishes, one that has stepped well beyond white plaster and even pebbles to encompass polished aggregate finishes and new options when it comes to colors in plaster, pebbles and even pool paints.

Clearly, suppliers have moved toward greater diversity and options as consumer demand for a broader range of quality products has increased.

I learned my first lesson in the materials-option game many years ago, when I began offering an all-tile option to my prospects. Mind you, this was several years back when a far larger number of my clients were in the middle class than is the case now. At the time, people in the industry told me I was crazy because, after all, there was no way regular working folks would pony up the money for all that tile.

Much to my satisfaction, however, a good number of my mid-range clients *did* opt for all-tile pools. Had they never been given the option, I'm sure they would have been happy with a lesser finish – but when given the choice, somehow they found the money. The tile surface was something that inspired them, and they decided it was worth the extra money to have something special.

The point behind all of this is that it's virtually impossible for me or anyone else to make value judgments for other people – which is exactly what we do when we limit the range of materials we offer.

### Whose Choice?

How can we possibly know what our prospects are willing to buy until we present them with their choices? To be sure, not many of mine have gone the all-tile

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route, but some have – and they wind up being very happy with the choice they made. And I have to say I didn't mind making a few extra dollars on those sales as a result.

I accept the fact that this notion of expanding the materials menu is a given when working with extremely high-end clients. These are often people who tell you, up front, that they are only interested if you can come up with something spe-

cial. At that point, doing the homework and ferreting out sources of supply isn't an option for me or any other designer.

But none of this diminishes the fact that the same principle works with clients of more modest means. In fact, I've found that whenever I'm dealing with a modest design and a supposedly modest budget, this is the time to emphasize options with distinctive materials as a means of mak-

ing the project special.

Here's my thinking: Small vessels require less material, so the added cost of coral or marble or natural stone or a couple of big boulders is going to be less than would be true with a big project. And, perhaps more significant, the net effect of the improved material is more dramatic in smaller jobs.

I recently designed, for example, a 5-by-5-foot fountain with an 18-inch deep basin. If I had stayed with a traditional approach to the project, I probably would have gone with bullnose coping, swimming pool tile and a white-plaster finish – and it would have looked fine, but not much different from thousands of other fountains out there.

Instead, I offered the clients some options, and they chose a beautiful glass-tile surface, coral coping and a gorgeous statue. Because the job was so small, the difference in total cost was a few thousand dollars.

If you were to put the two possible versions of this fountain side by side, one would be beautiful, a work of art, while the other would be common, barely worth a second glance. And the only difference would be in the materials.

### Forced Mediocrity

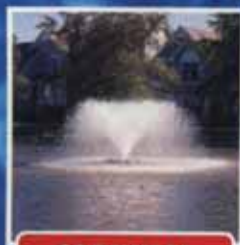
In recent columns, I've mentioned a spa project I did near Latrobe, Pa. – a stainless steel spa lined with deep blue/black granite. The clients came to me by referral, and when we first spoke they told me that they had already talked with several people from the pool industry.

One of the first things they mentioned was that they had not been impressed by the material options with which they'd been presented. They'd done some homework on their own, and they had decided not only that they wanted a stainless steel spa but also that they wanted something special to finish it off.

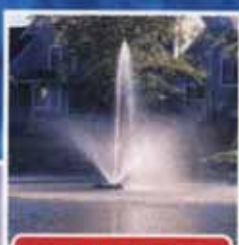
Some contractors they spoke with told them that stainless steel spas could not be surfaced with stone or any other material. When I told them that I was confident that I could meet their needs (and that, by the way, you *absolutely* can surface stainless steel with a variety of other materials, including stone and tile), they paid to fly me up to discuss the possibilities. Ultimately, they chose the dark granite as well as several other design options I suggested.

# Font'N-Aire

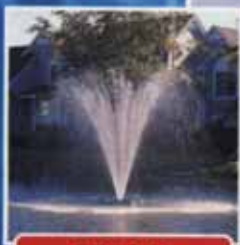
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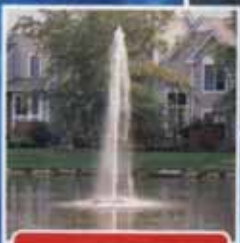
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A similar situation arose with clients in upstate New York who wanted their pool and deck to reflect and complement the architecture of their home. They, too, had talked with local pool companies who had refused to show them anything other than a few extremely ordinary tile options, none of which did the trick. And when the clients had pressed for more options, the contractors begged off, saying that

other materials were too expensive and too hard to work with.

Again, the clients reached me via referral and were anxious to see material samples. I packaged up a set of samples and sent them off, and they ended up selecting a beautiful tumbled verde marble – expensive and a bit more difficult to install, but a great look with which the clients are thrilled.

In these two cases and many more I

could share, clients ultimately came to regard me in a much different light than the other people they had encountered. And all I really had done was accommodate their desire to have lots of materials options from which to choose. The only difference between me and the others was that I was interested in exploring a greater range of possibilities.

## At All Levels

I am convinced through my own experience and many, many conversations with other designers and builders that what I've discussed here is much more than a high-end thing.

Sure, the issues sort themselves out more cleanly when budgets are large, but what we've covered here reaches to every level of the watershaping trades. It's absolutely an area where mid-range and even lower-end homeowners can elevate their projects in terms of value and aesthetics. (I'd also argue that the same ideas apply to hydraulic design and equipment selection just as well!)

The simple truth is that you don't have to be a zillionaire to appreciate beautiful things. That in mind, it makes sense to offer all prospects a range of material options – and let them decide for themselves what's too expensive or too exotic.

My informed suspicion is that if all watershape prospects were presented with a full range of materials, a great many would make surprising choices. More important, the beauty of the finished products and the satisfaction these clients would derive from them will be enhanced tremendously.

And if they *do* opt for bullnose coping, blue floral tile and white plaster, well, at least you can rest assured that you've determined what your clients really want – not just what they're settling for because they haven't seen anything else! **WS**

**Brian Van Bower** runs Aquatic Consultants and is a partner in Van Bower & Wiren, a pool-construction firm in Miami. He is also a co-founder of Genesis 3, A Design Group; dedicated to top-of-the-line performance in aquatic design and construction, this organization conducts schools for like-minded pool designers and builders. He can be reached at [bvanbower@aol.com](mailto:bvanbower@aol.com).



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## Container Style

Last month, we dug into the use of containers and accessories in garden designs and discussed ways in which they add interest, depth and dimension to almost any setting. This time, we'll get more specific and look at ways in which the same containers and accessories can be adapted to fit a particular environment – and used with various design styles.

To do so, let's start with long, rectangular pools (15 by 40 feet), place them in the yards of clients with different desires and see how we can blend planters into several popular styles.

**Contemporary:** If you have a very contemporary setting with no planting beds, containers can be used to create a backdrop behind the pool. Planting them with grasses or other linear foliage (such as Agapanthus, Irises or Fescue) will soften the containers slightly while adding interest to an otherwise sterile design.

I would avoid adding color or soft-textured foliage in this setting: It could become a focal point and might end up detracting from the contemporary nature of the environment.

Materials of construction are as varied as the shapes and sizes of the containers and accessories themselves.

From concrete, wood and lightweight composites to mixed materials, glass and other creative options, the sky really is the limit.

**Cottage:** With a cottage garden, a rectangular pool would need considerable softening. To do so, you could place pots and containers in front of and behind the pool or in planter beds – or wherever you might need to break up lines from the watershape or other design elements.

In this landscape, using a variety of plants – particularly those with medium textures (including Lavenders, Roses and various annuals) – can work well to tie all the elements of the yard together and soften the linear nature of the pool.

**Tropical:** Large-leaf plants work well to soften a linear watershape. In this case, unusual pots (and especially large ones that aren't overwhelmed by the large-leaf plants) can be strategically placed throughout a yard.

One approach would be to create a "jungle" look by softening up the front corners of the watershape with large containers underplanted by smaller containers – all filled with tropical-style plants such as Birds of Paradise, Cast Iron Plants or Agapanthus.

As this demonstrates, planter beds can be designed into any setting's style – and the use of containers is an easy and inexpensive way to add further interest, depth and dimension by creating new lines or softening up hard ones as needed. And remember: Containers are mobile, so if you or your clients don't like the spots you've chosen, most are easily moved to a better location. (It's not quite as easy to move a planter bed.)

It's also true that the plants within a container are easily changed. If they grow out of balance or a color change is needed, it's a simple matter to bring in new plants and give the scene a whole new look, no matter which style you have.

### Making Choices

As a designer, you have many choices when it comes to containers and plants.

Materials of construction, for example, are as varied as the shapes and sizes of the containers and accessories themselves. From concrete, wood and lightweight composites to mixed materials, glass and other creative options, the sky really is the limit.

In one "Surprise Gardener" episode (as discussed in my

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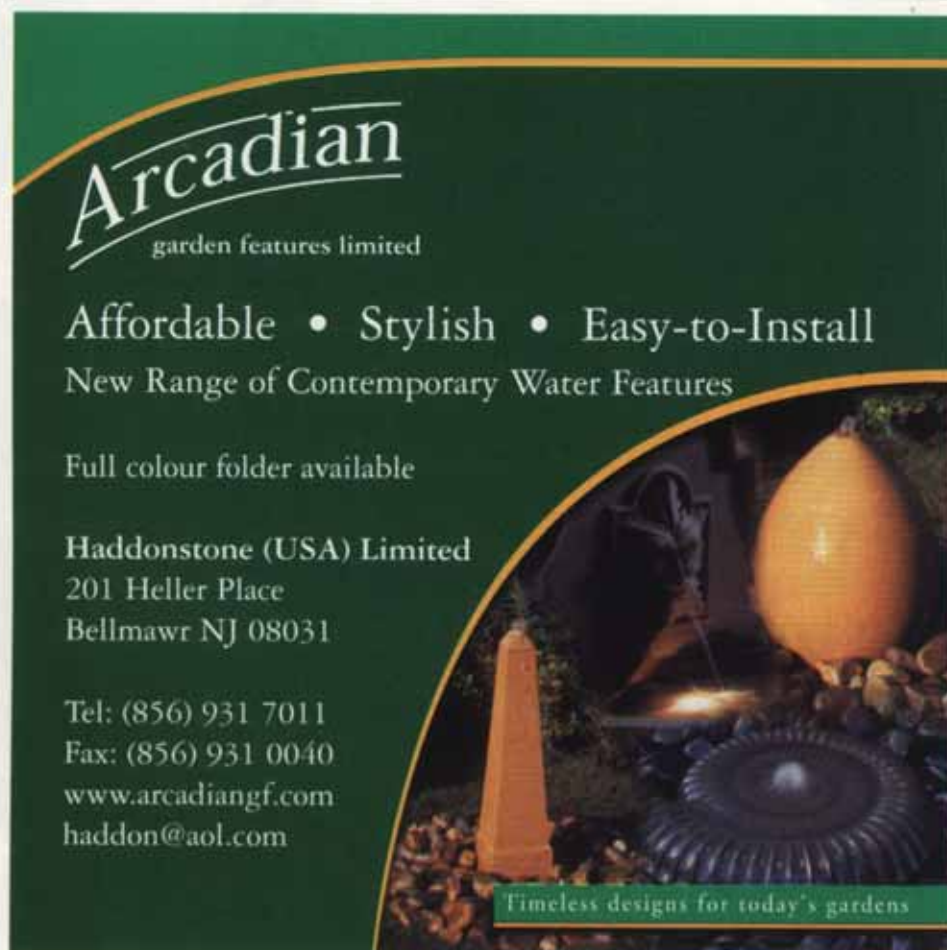
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## NATURAL COMPANIONS

August 2000 column), for example, we turned an old rusted truck chassis into a pond and inserted an oak barrel to house roses and other perennials. The only limitation is that your choices need to work within the style you and your clients have chosen.

The same holds true with plant selections: You're generally limited only by the characteristics of the plants as they relate to style.

I say "generally" because you also need to think about how well a given plant will do in a container. I'm all for experimentation and suggest trying out a specimen or two before investing in large quantities of any given plant. But I also want to be helpful, so let me give you a head start by listing a few of my successful selections.

Before I begin and as always, these recommendations apply best in my specific climate and plant zone. It's always a good idea to check with your local nursery to find out what container plants work best in your area.

**Grasses:** Almost any grasses work well in containers. What I've typically found is that when they become overgrown in their containers, it's easy to pull them out and replace them with fresh plants. Some good selections include *Pennisetum setaceum* (Fountain Grass), *Festuca ovina* 'Glaucua' (Blue Fescue), *Cortaderia selloana* (Pampas Grass) and *Ophiopogon* (Mondo Grasses).

**Ferns:** These temperamental growers have a few hearty specimens that work well in containers. *Microlepia* ferns, *Dicksonia* (Tree Ferns) and *Polystichum* (Sword Ferns) are good choices. In some areas, however, they may need to be brought indoors for the winter.

**Vines:** If you're looking to cover an arbor or the side of a house with vines, avoid planting them in containers. Vines in containers work best as small accents, because the container creates a barrier to mature root growth and limits the plant's overall growth. If you want to use vines, choose those that have greater size to start with, such as *Distictis buccinatoria* (Blood Red Trumpet Vine), the larger Climbing Roses or Wisteria. They will never reach their mature potential in a container, but if they are well watered and fertilized, they can soften small walls or hardscape and



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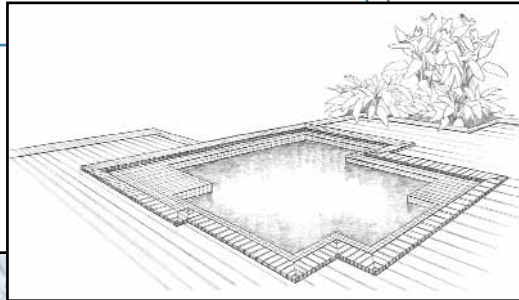
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offer nice accents.

❑ **Shrubs:** Your choices here are limitless. Just choose a plant that blends with the rest of the landscape and fits with the style. Some good choices include Lavenders, Roses and Gardenias.

❑ **Annuals:** Most people are familiar with using annuals in containers. They make the best display of color and offer a rotating palette so a garden can change with the seasons. The biggest problem with annuals is that they typically last from two to four months. If your clients are avid gardeners, they will pay attention to plants that look like they need changing out. Otherwise, they'll end up with a container filled with dead plants.

❑ **Perennials:** Although perennials for the most part don't look great during their off months, they have the advantage over annuals of coming back year after year. If that's what's called for, Digitalis, Yarrow, Rudbeckias, Lupines and Chrysanthemums are all good picks. I also think that underplanting perennials with annuals is great for creating focal points.

❑ **Bulbs:** These are easy to plant in any container and can be combined with any other plants. Containerizing actually makes growing bulbs easier, especially those that require digging up at the end of the season: You have a limited plot of soil in which to search for the spent bulbs and avoid having to hunt for those you might scatter in a garden.

❑ **Trees:** As a rule, I avoid using trees in containers – but containers are great for trees whose growth you want to minimize. If you have an area where you need a small tree to make a statement, for example – and you want it to stay small – a large container (at least 15 gallons) will serve the purpose. **VS**

**Stephanie Rose** runs Stephanie Rose Landscape Design in Encino, Calif. A specialist in residential garden design, her projects often include collaboration with custom pool builders. If you have a specific question about landscaping (or simply want to exchange ideas), e-mail her at [sroseld@earthlink.net](mailto:sroseld@earthlink.net). She also can be seen this season in six new episodes of "The Surprise Gardener," airing Tuesday evenings on HGTV.



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## Genesis 3 Schedule, Winter 2002

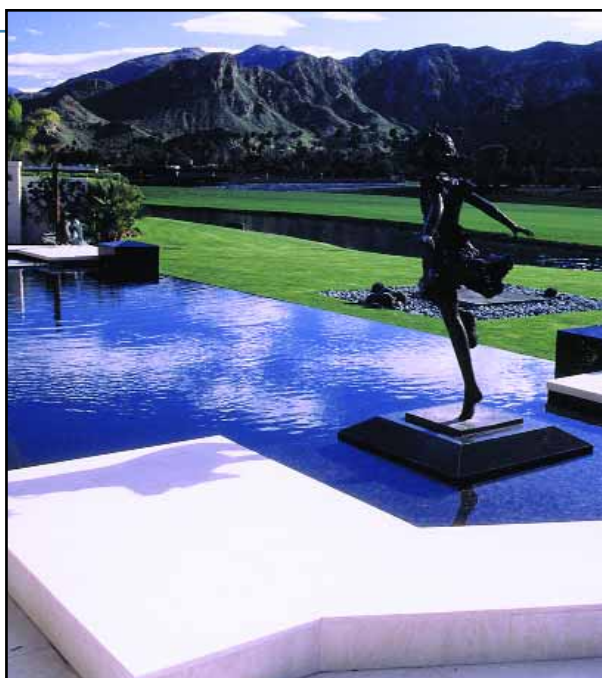
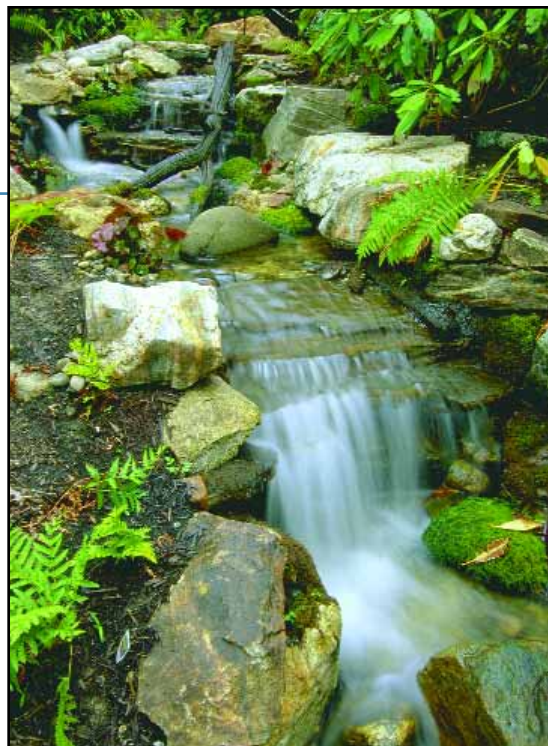
This winter, David Tisherman, Skip Phillips and Brian Van Bower are hosting two very special Genesis 3 events: The group's first-ever Pond School and the latest in the series of increasingly popular Level I Schools.

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### Genesis Pond School

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February 13-17

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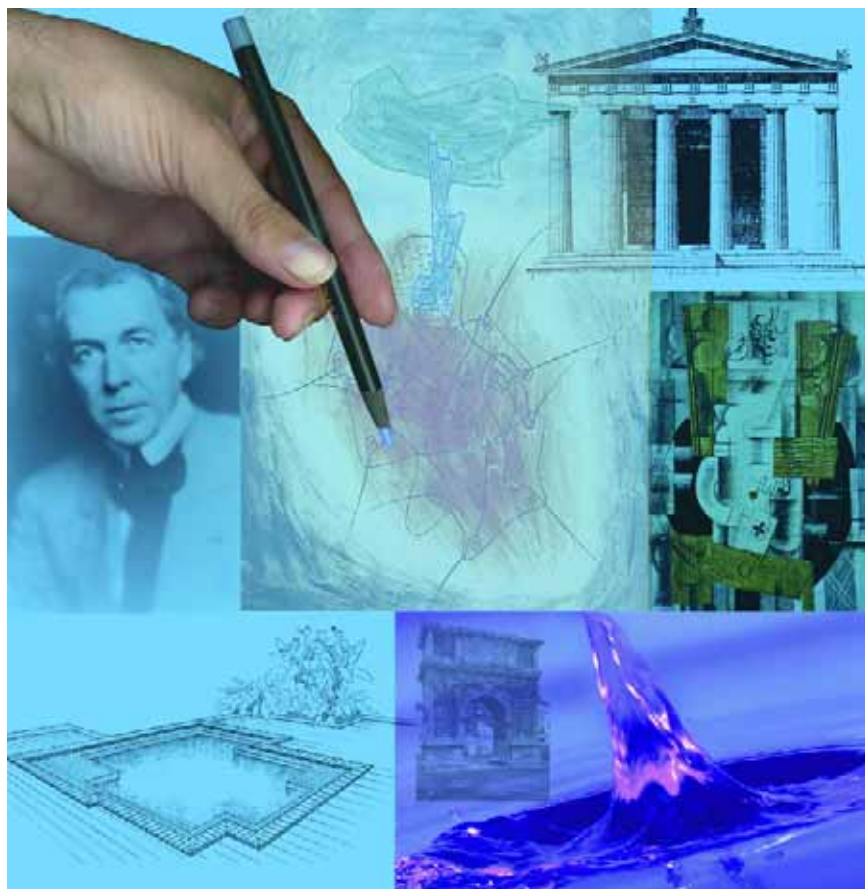
### Genesis Level I School

The flagship school in the Genesis 3 program, this school focuses on design, engineering and construction of watershapes, drawing techniques and the Genesis 3 philosophy. Open to all applicants, this is the access point to advanced Genesis Family programs and demonstrates what it takes to operate at the highest level of expertise – including up-close and personal familiarity with the lifestyles of high-end clients.

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## The Power of the Pencil

People who know me are aware of the fact that I can be quite outspoken. They know I've been extremely critical of the pool and spa industry and have made it my crusade to argue that, as an industry, we need to elevate our game. My particular concern lately has to do with the areas of design and presentation.

Before I get started, please note that what I'm about to say is directed mainly to readers who come to *WaterShapes* through what is traditionally labeled as the pool and spa industry. (To be sure, this information should also be of interest to those of you who come to watershaping from the landscape industry because it spells "opportunity" in big, bold letters, but you aren't the focus here for reasons that will become apparent.)

Here's the unvarnished truth: No more than a hundred pool builders out there can legitimately call themselves designers (and that may be overshooting by a couple dozen), while only a handful design at the very highest level. Almost always, the difference between these top-level designers and the rest of the pack is formal education in art and design as well as an open-

When it comes to designing and building, the person with the pencil has the power. That's true among architects, landscape architects, interior designers, industrial designers and others who clearly and deliberately shape our environments.

minded career marked by serious independent study.

### It's Fundamental

Let me talk about my own experience to illustrate what I mean. I have an edge over just about everyone in the business because I have been educated in formal ways in which others have not. I have a further advantage in that I've taught college-level courses in drawing and design and was good enough at it that I was named teacher of the year at UCLA in 1988.

I won't belabor the point with a full list of credentials, but the simple fact is that developing true design skills requires a long-term (and almost certainly a lifelong) commitment to education. There simply are no shortcuts – and that's a tough pill to swallow in an industry that historically has ignored the importance of educating its members in skills they truly need.

I put it this way: When it comes to designing and building, the person with the pencil has the power. That's true among architects, landscape architects, interior designers, industrial designers and others who clearly and deliberately shape our environments. The problem with the pool industry is its widely held perception that a pencil is all you need to declare yourself a designer!

Sure, some of you draw well enough to impress yourself and even pull in a client or two or ten – but until you acquaint yourself with the true power of the pencil and get serious about what it is to be a de-



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signer and the responsibilities and historic burdens that come with wielding that kind of power, chances are you won't even recognize your own shortcomings.

The truth is that few pool people know enough about the tools with which you're working. You don't know, in many cases because you never had the opportunity to learn, about things such as the dynamics of line, proportion, scale or color. Yes, you might know the words and even what they mean, but you don't *know* about them on a cognitive level the way a trained designer does.

The same holds for knowing about the relationships between shapes and the nature of materials, joinery, perspective, light, shadow and a thousand and one other design components. Most of you are probably fuzzy on the tools of the trade, too, including pens and pencils and markers and paper and printing techniques. Unfortunately, many in the trade don't know the difference between a bond beam and a beam compass, let alone how

to use one to make your life easier.

Then there's the output of the designer, including perspective renderings and three-dimensional effects that literally jump off the page and drawings that communicate about textures, work with shadow and properly render water and reflections. This is the designer's workaday world, and I have to say it's an interesting place to be.

### Gaining an Edge

What I know about all of this "design stuff" gives me a tremendous competitive advantage. And it's not all about drawing or drafting skills, because that's only part of a designer's education.

For one thing, there's a huge amount of specialized information about construction that a pool designer—especially a designer who also builds—must know to be able to generate projects that work in practical as well as aesthetic terms. So I've spent a career learning about soils, structural engineering, hydraulics, steel, concrete, finish materials, tile—and I still learn something



The capacity to render three-dimensional shapes with pencil and paper is invaluable to the watershaper. It clearly calls for an understanding of geometric forms and the relationship of light and shadow. Not quite so obviously, it's also about how you use pencils and tools made for manipulating graphite once you've put shapes down on paper that make the biggest impression.

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new just about every day because I'm always pushing myself to the limits of what I know.

Once I completed my formal education, I also began what I am certain will be a life-long exploration of the work of other designers. My home and office are filled with books by and about people I admire – an eclectic group that includes Charles Rennie Mackintosh, Le Corbusier, Rube Goldberg, Georges Braque, Mies van der Rohe, Paul Klee, the Archigram group, John Lautner, Claude Monet, Riccardo Legoretta, Fernand Leger and dozens of others who shaped design, art and architecture of the 20th Century and whose influence on my own work is absolutely unmistakable.

I travel a lot, too, and make a point of going to see first hand what all the fuss is about. I've been to the Alhambra in Spain, to Greek and Roman ruins in Turkey and to Japanese gardens in Kyoto and other cities in Japan and the Picasso Museum in Paris. Travel is indeed broadening, and the places I've seen have had a profound influence on the way I look at all other places and my own projects.

I've been all over the United States as well, and I'm willing to go well out of my

way to see things I consider important, from Frank Lloyd Wright's Taliesin studio in Wisconsin to Hearst Castle in California or Wright's Fallingwater in Pennsylvania. If it's there and accessible, I want to see it with my own eyes.

What I see, I use to inspire my own designs. I also use those places and things to be conversant with my clients, many of whom are as well educated in the arts

and art history as I am – and who sometimes know a lot more about the things they really like than I ever will. I've mentioned this before in my columns and articles: Being knowledgeable on this level is a real competitive advantage.

And remember, it's not my customers with whom I'm competing: Generally speaking, I compete with other pool builders – and I usually come out ahead.

## Half Baked

A fellow pool builder once told me, "I build the same way you do with the same degree of quality in construction. But I don't design as well as you do."

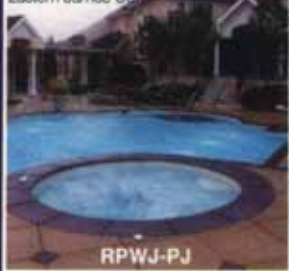
In saying this, he revealed a common misunderstanding of the relationship between design and construction: Just as poor construction can make the best design a mediocrity, the best construction isn't adequate if it follows a poor design. So even if this person's construction approach were completely bulletproof, his projects would tend to be less than successful because the visual and aesthetic components would be lacking.

A good project is a whole project: When excellent design is matched with excellent construction, the work will stand the test of time.

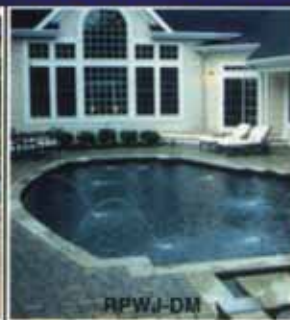
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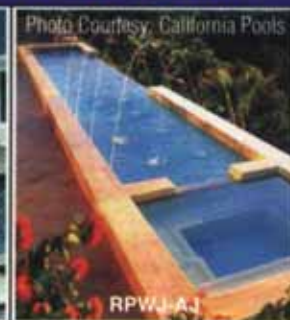
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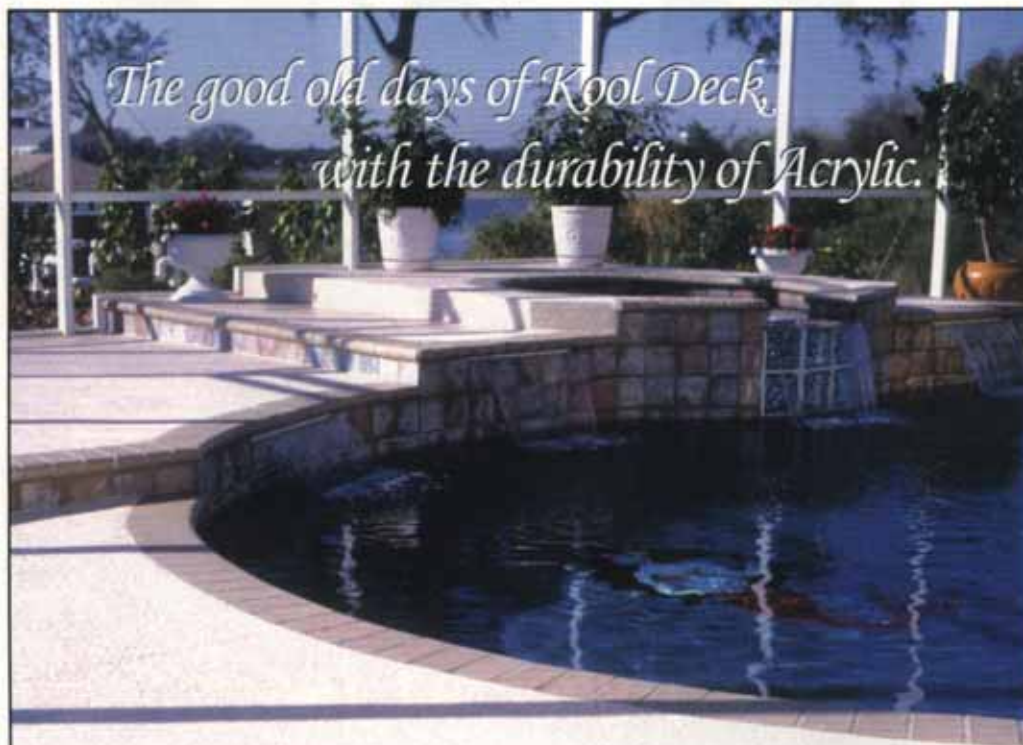
The reason I come out ahead is because I can take all of this background and the experience I've gained since my formal education ended 25 years ago and can channel it from my brain to my hand and onto paper or whatever else it is I'm drawing on.

It's *all* about drawing and the way I use this skill to communicate with my clients. This skill enables me to stand in a space and help my clients visualize its potential. It lets me help them see details, understand the elevations and begin to get a sense of textures and contrasts and materials and how they relate to one another. In effect, it lets me pull them *inside* the design – and that's the real power of the pencil.

I do this drawing stuff very, very well – and as I learned in 12 years of teaching drawing/design classes at UCLA, it's a skill I can communicate to others. For the past few years, it's been the focal point of my role as principal instructor for the Genesis 3 Schools, and it's going to be the entire



Making effective, professional presentations for clients is radically simplified if you know how to convey basic information about color, contrast, materials, textures, line and spatial relationships in a rendered flat plan. Not only is art like this invaluable for work with clients: It's also a valuable tool on the job site when you need to explain the space to subcontractors.



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focus of a Genesis drawing school we'll be conducting at Arizona State University in March 2002.

One of the things I enjoy most about teaching is that it gives me as much of an opportunity to learn from my students as they have to learn from me. I love to sit down with others and compare drawings, point by point. I'm often critical of what I see (and am not known for pulling punches), but where there's merit, I get excited.

This is what real designers do: They learn from each other. They spend time studying and discussing the masters and then take that knowledge and apply it to new situations. And the best vehicle for communicating at this level is almost always pencil and paper – the designer's indispensable tools.

### Dead Architects

I'm sure many of you have heard my story about an industry gathering in Phoenix during which I asked a group of fellow builders if any of them had visited Taliesin West while we were in town.

I was disappointed to meet with silence – with the single exception of a friend of mine who was versed enough in Frank Lloyd Wright's work to recognize the name of the great man's western design studio.

After I explained what it was and how important a place it had been in educating a generation of famous designers who followed Wright, I was floored by the comment of someone who should have known better, who said: "Who cares about him? He's dead."

I could write a book about that ludicrous response, but let me boil it down to a sentence: You need to care about the pioneers and practitioners of modern design because they matter to your clients and, know it or not, shape just about everything you do.

– D.T.

Before I continue, let me emphasize a point I made up front: This discussion isn't about those of you who have been formally educated in the landscape trades and who read this magazine because of our common bond with water. Many of you *do* have extensive backgrounds in design theory, art history and presentation skills. And I'm well aware through my discussions with some of you that you,

too, are aware of the huge gaps in the pool and spa industry's bootstrap approach to design education (and see wonderful opportunities as a result).

You see us as folks who just can't shake the "pool guy" image – a broad brush and an unfair generalization, but an easy image with which to saddle the only construction trade I know of that offers its practitioners nothing by way of formal education.

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## A Thousand Words

If simple love of good design isn't enough to motivate pool guys to work at transcending that label and image, maybe we can all break through if we get practical and look at drawing and presentation skills as a clincher in the sales process.

Watershapes are primarily visual in nature. Yes, they need to function properly and there are important auditory and tactile elements to them, but they are first and foremost about looks. As clients are buying, they are visualizing—and I would argue (as my own experience has taught me) that the presentation process exists to help them visualize in a way that inspires them to buy.

When I sit down with clients, I impress them immediately with my ability to pull out a pencil and start sketching ideas as we're discussing them. Later, when I come back with a fully rendered image, there is usually no turning back as far as they're concerned.

Some of my critics think this is so be-



To communicate ideas effectively, a designer must be able to work with one- and two-point perspective. In a way no flat plan can, perspective drawings help clients visualize a three-dimensional space—the relationship of object to object, an impression of scale and proportion and movement through the space—in ways that can be crucial to their acceptance of your designs.

cause I work with wealthy clients, but I say that's a load of bunk because I know for a fact that an upper-middle-class client looking to spend \$40,000 to \$60,000 is just as interested in a good presentation as the client who might be spending

\$400,000 to \$600,000. It's all about quality, and it all begins with the presentation.

Fact is, watershaping is a design-driven process, no matter whether you come from the pool and spa industry or from the landscape trades. Whatever your



Top: Kasco's 2 HP "Linden" with L-375 lighting option and the 2 HP "Aspen" displays. Bottom: The Kasco 3/4 HP, F3400/VF Decorative Aerator. Other display patterns are also available.

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background or experience as a water-shaper, the basic requirement for participating at the design level is education – and the edge always goes to the designer rather than the pretender.

What I've said here so far will almost certainly rub many of my friends in the pool and spa industry the wrong way – and that's my intention. If I've made you mad or offended you in a milder way with my perspectives, then for heaven's sake challenge me to do something about it! After all, there's not much point in lambasting an entire trade if you can't suggest a solution.

I've written before about my wish that someday pool design will be adopted into some forward-looking university's landscape-architecture curriculum and that tomorrow's pool designers will have access to formal education in the craft. Short of that, there are the Genesis Schools – and, in particular, the drawing school I'll be teaching March 10-16, 2002, in Phoenix.

I want to teach you how to draw and how to design. Obviously, one instructor in a one-week course can't accomplish perfection, but I'll give it my best and at least set you off in the right direction.

### Putting Up

Yes, this is a blatant plug for the program, and I must say I had to pull out all the stops to get the folks at *WaterShapes* to let me use my column in this way. But I argued with them as I will with you that this isn't too far removed from "Details" of the sort I've discussed in the past, if only because the way I get my clients to see what I see and how I get construction crews to do what I want them to do with respect to those details all comes from my ability to use pencil and paper effectively.

So now you have a chance to show up and challenge me to teach you how to draw in a serious, focused, challenging week of intensive training. There will be homework, critiques and tons of useful information. Will I be able to teach you everything you need to be a designer? Of course not, but I guarantee that you will walk away with a far larger pack of skills than you'll start with.

For years, I've been branded as abra-

sive and arrogant – a provocateur who constantly raps his own industry. That may be a fair characterization, but what some people don't understand is how much I love this business and how much it pains me to see an art form abused by people who should know a lot more about what they're doing.

Now let me do my best to show you a new beginning.

**David Tisherman** operates David Tisherman's Visuals, a design and construction firm based in Manhattan Beach, Calif., with offices in Marlton, N.J. He is co-founder and principle instructor for Genesis 3, A Design Group, which offers education aimed at top-of-the-line performance in aquatic design and construction.

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# Shaped in the Heartland

By Curt Straub

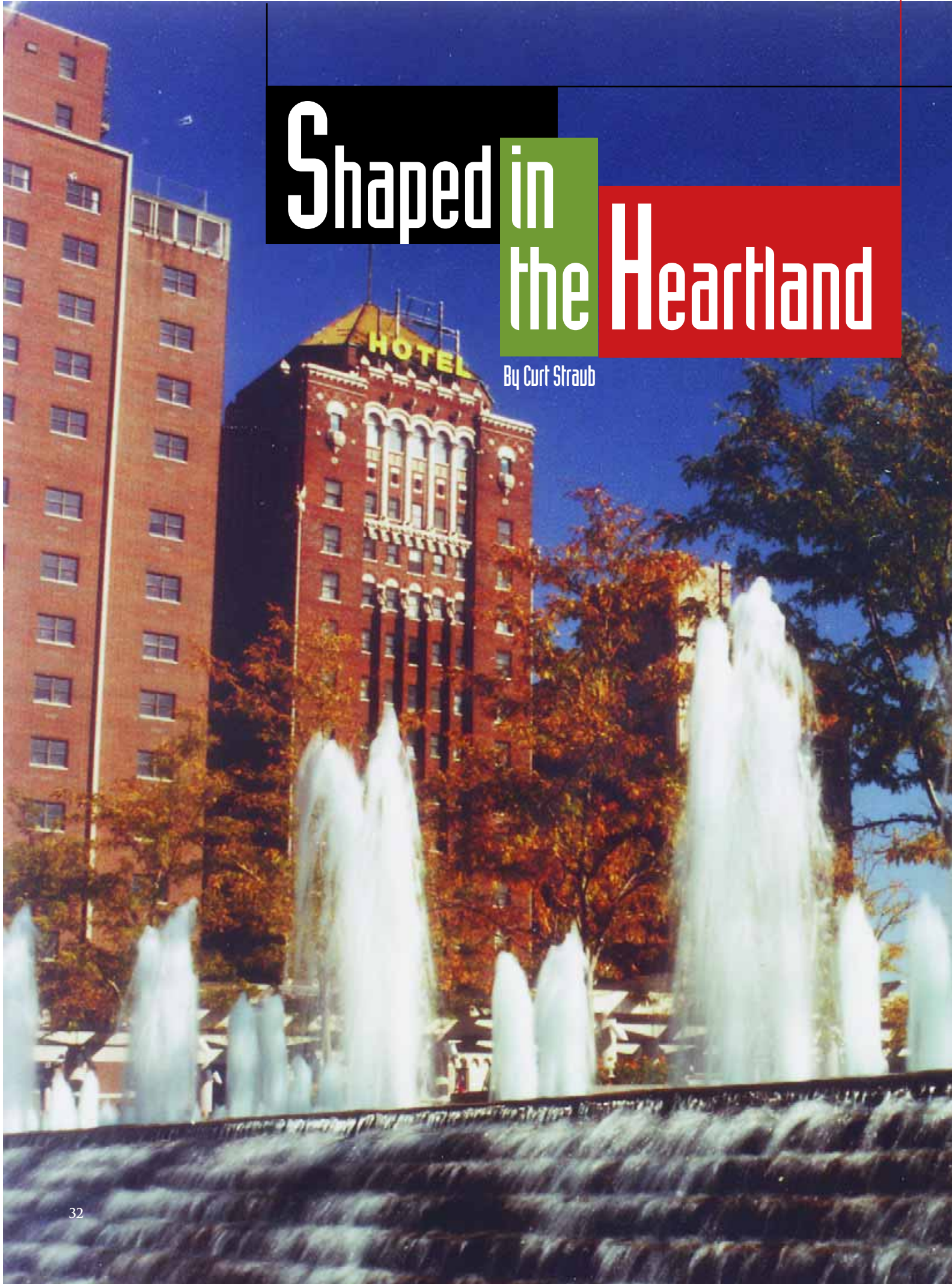






Photo courtesy City of Fountains Foundation, Kansas City, Mo.

Encompassing a wide spectrum of artistic styles and making statements that range from the modest to the magnificent, the fountains of Kansas City are so tightly woven into the urban fabric that the town is justly known as 'The City of Fountains.' Here, watershaper and Kansas City resident Curt Straub pays tribute to a tradition of fountain-craft that has shaped so many public spaces of his city — and defined a community's pride.

Kansas City, Missouri, proudly calls itself "The City of Fountains," and it comes by the title legitimately. In fact, more than 150 public fountains grace its plazas, boulevards, parks and public buildings, and the community has long held to a tradition of creative use of moving water and sculpture in developing its public spaces.

As a resident of the city, I get a sense of civic history and our collective self-image as I look at these fountains. As a watershaper, I take additional pride in the variety of forms and styles I see and in the course of technological development that has lifted fountains to new heights of aesthetic and functioning glory. It's basically a living museum of the art of fountain-making.

It has helped that, throughout the city's history, civic and commercial leaders have placed both the development of public *and* private lands' use of decorative water high on their list of priorities. In doing so, these individuals succeeded in fostering a culture of fountain-craft that has given us a dazzling array of public watershapes — and many of our most treasured points of civic identity and pride.

*This sprawling fountain, built for Barney Allis Plaza in 1985, features numerous vertical plumes and soothing cascades. A modern symbol of civic pride, the fountain is surrounded by downtown hotels, the city's music hall and its convention/expo center.*





*Kansas City's fountains have become focal points – accents to a vibrant nightlife and gathering places for kids of all ages. The fountains on Brush Creek, set up adjacent to The Plaza shopping area, float on a natural waterway and send dramatic geysers into the air (A), while Crown Center Square's interactive dry-deck fountain, with 49 nozzles spaced over 2,000 square feet – is a magnet for kids who want to beat the heat (B).*



Photos by Bill Williams



## BY THE WATER'S EDGE

People who live here have long appreciated the natural beauty of the region's rolling hills, the thriving banks of the Kaw and Missouri rivers and the limestone bluffs upon which the city was built. From the start, Kansas City has been blessed by decisions to use water to adorn its public spaces – a tradition that began more than a century ago but which has blossomed in the past 50 years into something truly meaningful and dynamic.

Some fountains serve to commemorate historic events, celebrate public figures or honor local heroes. Others are there simply for beauty's sake. Together, these works of public art provide the citizens of Kansas City with places to gather, reflect and celebrate. They give the city its identity while adding luster to the fabric of our urban tapestry.

In many ways, in fact, the fountains of Kansas City represent the extreme potential residing in the art of watershaping to beautify and define the environments we create for ourselves.

As is true of many other great cities where fountains are found, Kansas City's first fountains were used to provide drinking water and to cool the air in the heat of summer. Natural springs were the source for these original fountains: Surging from fissures in the limestone rock, the water was captured in large basins to satisfy the thirst of townspeople and their beasts of burden.

Kansas City experienced tremendous growth in the middle decades of the 19th Century, when the population grew from 4,000 in 1865 to 60,000 by 1880 and made this one of the largest cities west of the Mississippi. With sudden growth came an acute need to develop an infrastructure, and as part of its potable water system, the city installed hundreds of drinking fountains.

The city also was fortunate at that time to have civic leaders who favored the development of parklands. As early as 1875, developers provided fountains in a handful of parks; within 20 years, a city-wide plan emerged that called for mass-scale development of parklands, roads and fountains.

In 1893, landscape architect George E. Kessler and business leader August R. Meyer outlined a system of city parks to be connected by boulevards emanating

from the core of the city along the four main compass points. The plan called for extensive development of the rugged river-bluff terrain and for creating destinations within the city in the place of blighted wastelands. It also set aside large tracts of land for public use and included plans for many public waterfeatures.

## MAKING THEIR MARK

Although controversial at the time, Kessler and Meyer's 1893 plan drew strong support from newspaper publisher William Rockhill Nelson and prominent attorney Delbert J. Haff.

These four men, although they came from different backgrounds, shared a vi-

Photo by Bill Williams

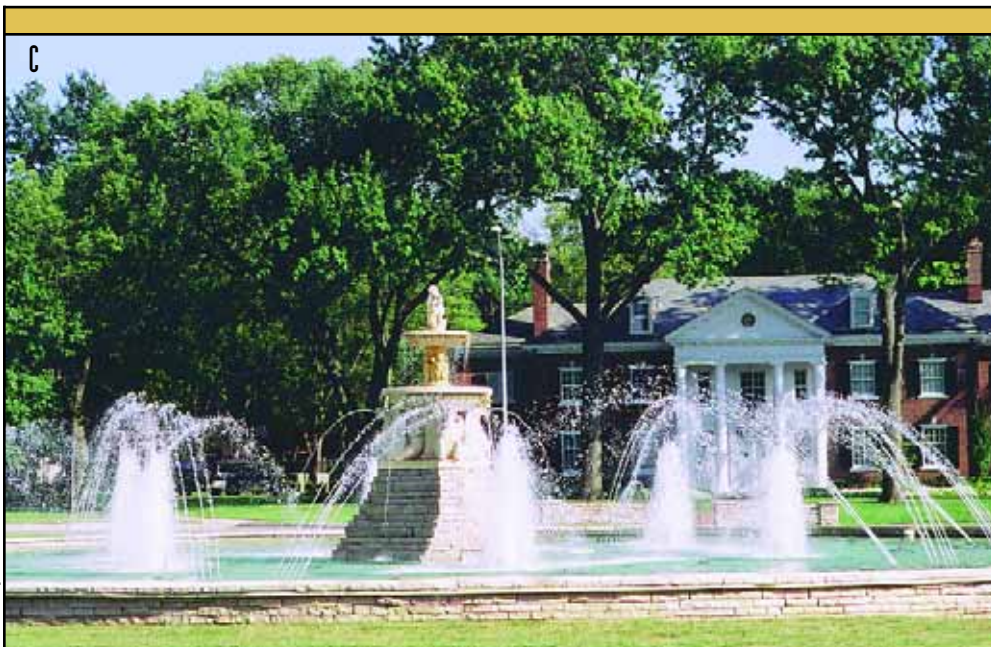


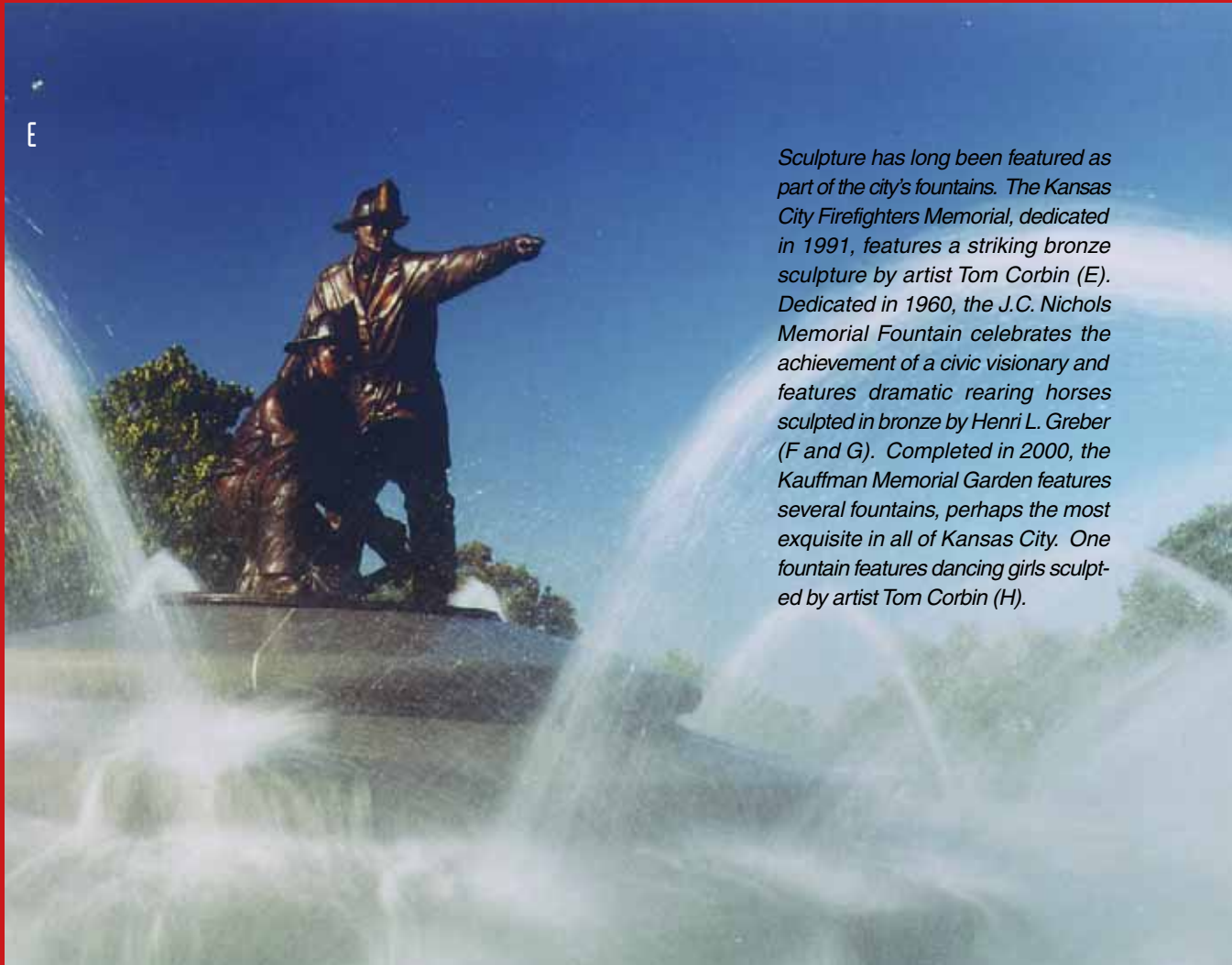
Photo courtesy City of Fountains Foundation, Kansas City, Mo.



*The fountains of Kansas City can be overtly monumental, too, as is the case with the fountain at Meyer Circle (1924), which features sculptures imported from Venice, Italy (C); and the Northland Fountain, which was built in 1983 as the culmination of a major community effort (D).*



E



*Sculpture has long been featured as part of the city's fountains. The Kansas City Firefighters Memorial, dedicated in 1991, features a striking bronze sculpture by artist Tom Corbin (E). Dedicated in 1960, the J.C. Nichols Memorial Fountain celebrates the achievement of a civic visionary and features dramatic rearing horses sculpted in bronze by Henri L. Greber (F and G). Completed in 2000, the Kauffman Memorial Garden features several fountains, perhaps the most exquisite in all of Kansas City. One fountain features dancing girls sculpted by artist Tom Corbin (H).*

Photo courtesy City of Fountains Foundation, Kansas City, Mo.

sion of a city laced with beautiful parklands that were to include a number of fountains, ponds and lakes. The debate over the costly plan raged for nearly a decade, but shortly after the turn of the last century, the citizens of Kansas City voted 10 to 1 in favor of the plan.

This decision would set the tone and establish a culture of creating beautiful public areas that would guide the development of the city straight through the 20th Century.

Growth accelerated through the early years of this period largely through the efforts of one man – developer Jesse Clyde Nichols, who began building homes in Kansas City's burgeoning neighborhoods in 1905. He single-handedly created large residential areas and, in 1907, set up a 10-acre subdivision that incorporated portions of Kessler's original plan.

The key, as history has shown, was Nichols' desire to keep various of his developments connected with others. So he built broad boulevards and dotted them with plazas that featured fountains and statuary and, by 1922, undertook construction of the shopping district known as Country Club Plaza, which became a major cultural and economic hub for the city. This area featured Spanish styling and dozens of fountains and sculptures.

In the decades that followed, fountains were almost always part of the plans of any developers who wanted to gain public acceptance for their ideas. Before long, it seemed

F

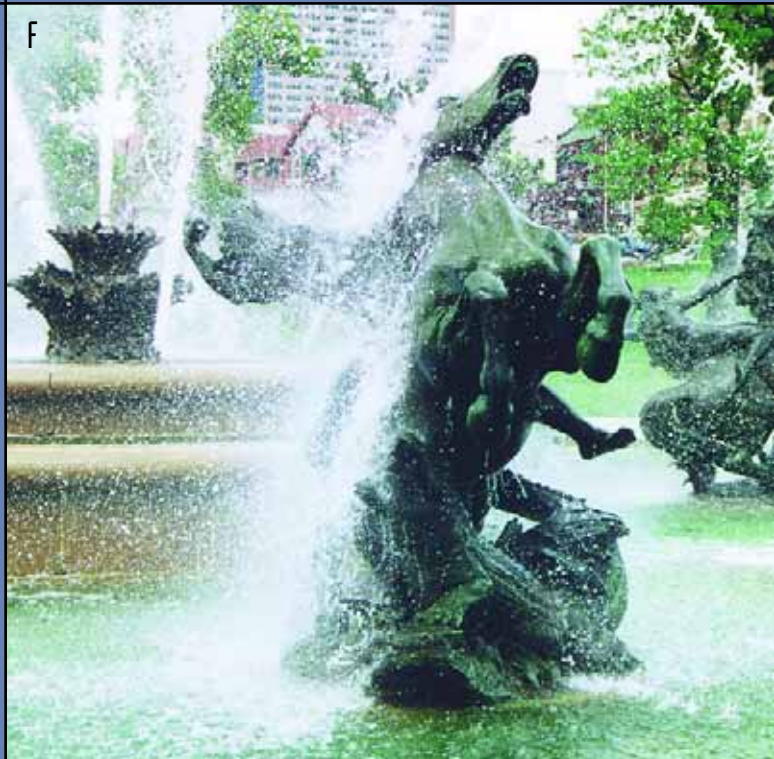


Photo by Bill Williams





Photo by Curt Straub



Photo by Bill Williams





that fountains were part of every ambitious project – parks, subdivisions, buildings, shopping centers, memorials, residences or roadways.

In 1963, the city's ever-growing number of fountains received a boost when Frank Vaydik, the director of public parks, launched a 16-year campaign to dramatically expand the size, function, quality and programs of the city's park system. It's quite a legacy: Many of Kansas City's most stunning fountains were built during Vaydik's tenure.

#### GRAND-SCALE CIVIC PRIDE

By 1973, The City of Fountains Foundation had been created to develop national awareness of Kansas City's many beautiful fountains. The not-for-profit foundation supports the development, construction and maintenance of fountains (old and new) in the greater Kansas City area and does all it can to make certain people across the country are aware of this midwestern treasure.

What I find so exciting is that, unlike more historic fountains found in places such as Rome or Paris, the fountains of Kansas City are still being built. It's a city that encourages and celebrates the art of watershaping in the here and now as much as it reveres and celebrates the past. Almost every year, it seems, a new fountain is built in one public place or another or in conjunction with a new commercial development.

As you travel around Kansas City today, you see example after example of the sublime power of water to create and inspire public places with beautiful views and a sense of civic identity. It's a tradition *this* citizen hopes will continue indefinitely. **WS**

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J

The city boasts several distinctive and unusual fountains, including the Seville Light – an exact replica executed by sculptor Bernard Zuckerman of an original located in the plaza near the Giralda Tower in Seville, Spain (I) – and Spirit of Freedom, sculpted by Richard Hunt to celebrate the contributions of Kansas City's African-American community (J).

Photo by Bill Williams



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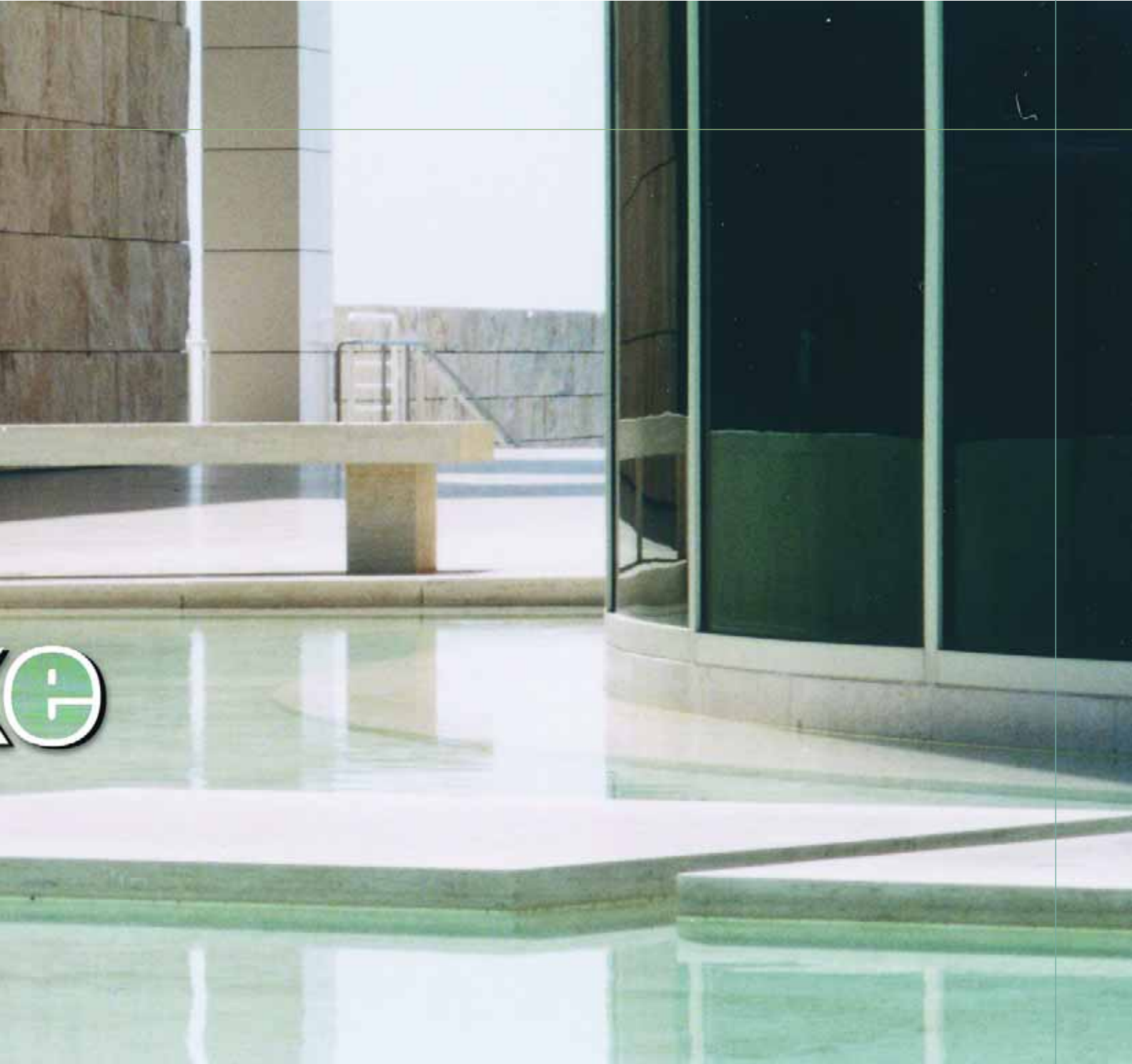




# For Art's Sake

**Draped** across a mountaintop overlooking Los Angeles, the Getty Center is truly monumental. But if you can wrest your attention from the outsized galleries and imposing offices and endure the always-large population of visitors, you find yourself in spaces uniquely moderated and defined by the use of water – as decoration, as diversion and as counterbalance to the gleaming, hard-edged structures that sur- **By Jim McLoskey**





The Getty Center is a true multi-media experience: imposing architecture, lots of people, incredible materials of construction, amazing views, diverse spaces, rich and varied sounds – and it’s mostly all a bonus, because none of this has much to do with the Los Angeles center’s core functions as museum and research institution.

Designed by architect Richard Meier, the 750-acre campus is dominated by enormous structures wrapped in travertine, glass and enameled aluminum. It’s all a bit cold (maybe time will soften the sharper edges and reduce the glare), but the smaller spaces in between the angular build-

ings will always make warm impressions, including Meier’s compact watershapes, fountains and reflecting pools; the gardens by landscape architect Laurie Olin; and, in particular, the central garden and watershapes created by artist Robert Irwin.

There are enough creative uses of water here to make the Getty Center a worthwhile stop for any watershape designer or builder – and the Mother Lode for those motivated to explore ways of using water’s full range of sounds and its sheer visual energy to bring comfort and intimacy (as well as rich, artistic symbolism) to spaces large and small.





## In Approaching

the center, you get an immediate visual and auditory reward: Off to the left of a grand entry stairway stands a line of a dozen or so vertical jets of water framed in arches of carefully trimmed greenery.

In what is otherwise an austere, gleaming modernist space, the framed jets offer a warm classical reference – a use of a familiar stylistic vocabulary that puts visitors at ease even if they aren't conscious of the watershape's references to the Alhambra in Spain or the Villa d'Este in Italy.

Around the corner on the stairway is a modernist version of a Renaissance water chain, falling from the top level all the way along the left side of the stairs and flowing around the corner to the greenery-arched jets just mentioned. It's a source of aural comfort in a noisy, busy space – although I wish the safety railing could come down and let it be more of a visual (and photogenic) treat as well.



## The courtyard

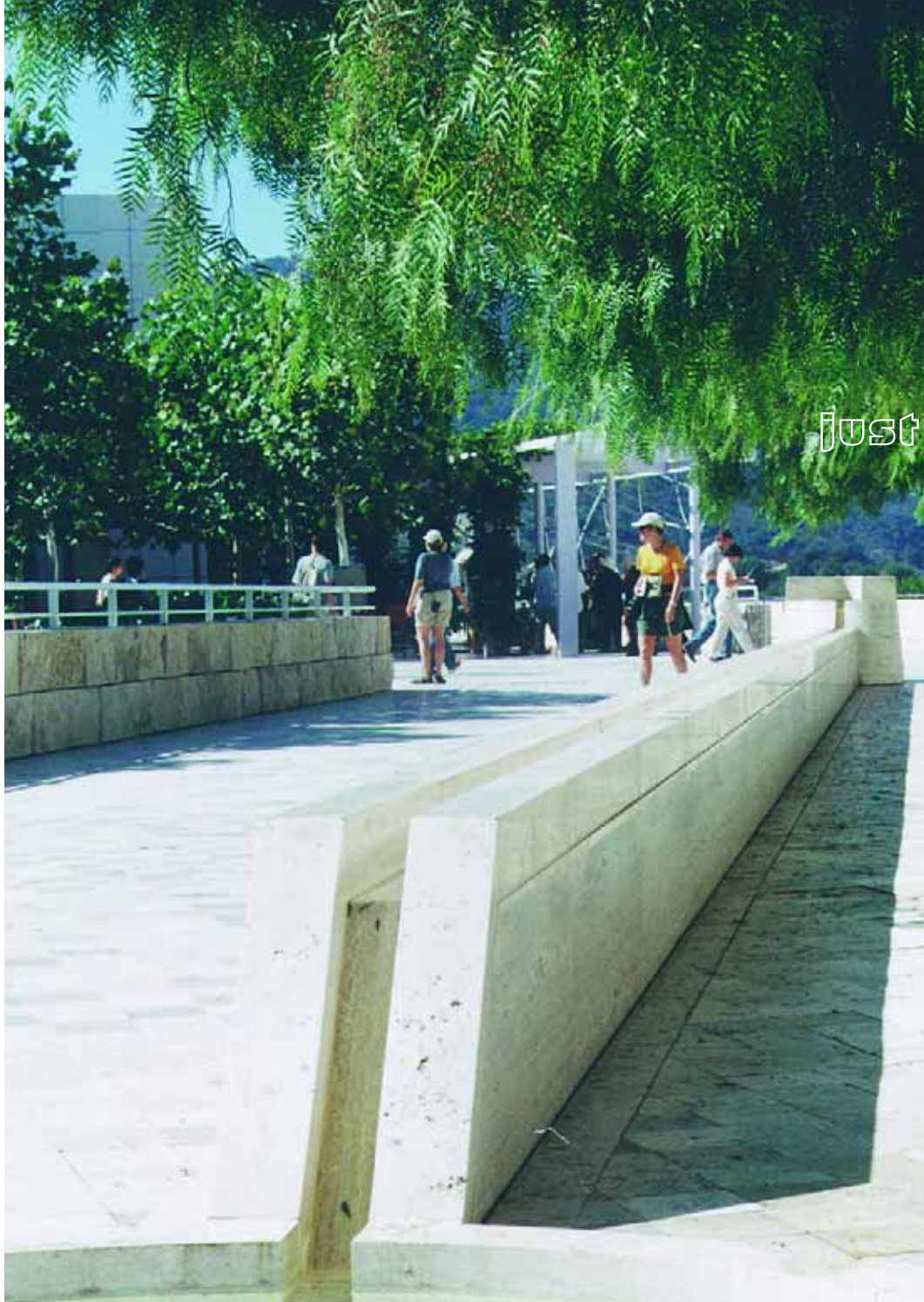
of the main gallery complex offers another evocation of Renaissance Italy in the long reflecting pool lined on one side by Mexican Cypress trees. This time, water jets reach gracefully across the pool, their arcs and splashes serving to cool the air for visitors seated at café tables or walking through the plaza.

There's also a trapezoidal reflecting pool that wraps snugly around the entrance to one of the galleries. The fountain/sculpture at the pool's leading edge is a bit ungainly, with large jets of water rising artificially (and awkwardly) among and above large, rough boulders. But taken here in contrast with the carefully shaped travertine found just about everywhere else on the campus, the boulders and jets make a knowing statement about our shaping of the environment that is echoed again and again in spots all over the Getty Center.

As for the reflecting pool itself, the floating pads (seen on pages 40 and 41) seem to have been intended as a walkway between galleries. Unfortunately, safety concerns appear to have struck once again, mandating the placement of benches to keep people from experiencing the water in more intimate and encompassing proximity. In my mind's eye, however, I prefer to see this pathway as I think it might have been.







## just outside

the gallery complex, you encounter a round, polished, turret-like structure. When you peer into the turret, you see a tiny pool of water that wells up in a central cylinder and overflows down an incline into a thin, elevated gutter that runs the length of a very long, narrow space.

At the far end of this austere form, the water drops down another ramp into a larger bowl with a hole in its center into which the upwelling water eventually and very gradually flows. This isn't the end of the experience: Rather, it's a window that invites you to a scene that unfolds below.

Continued on page 46





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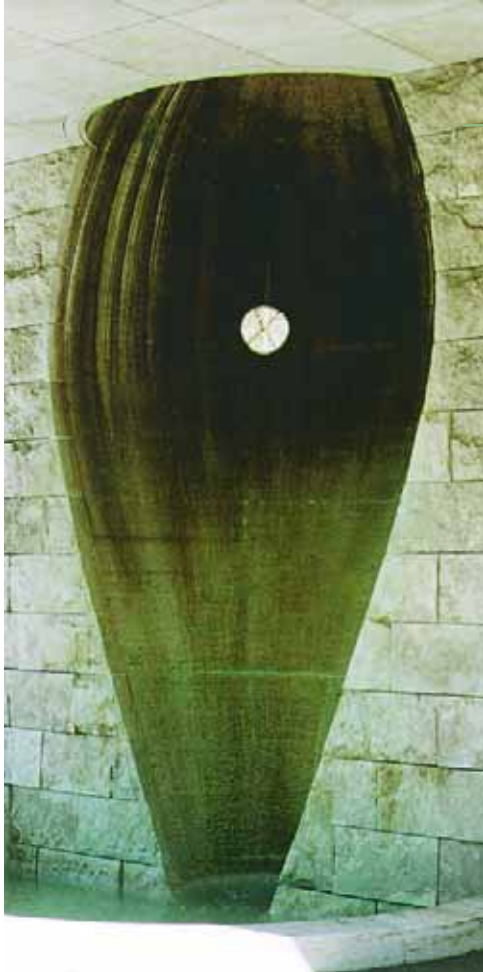
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## Leaving the

upper terrace, you emerge into a space where the water from the turret eventually flows down along the rough walls of a droplet-shaped niche and into a large catch basin. As you absorb impressions from this unusual and unexpected scene, you hear water flowing in the space opposite the basin.

This is where Robert Irwin begins to work symbolic magic and the serious watershaping begins: Opposite the suggested watershed of the droplet-shape niche – and perhaps built upon the mere trickle of liquid from above? – a stream now begins flowing in earnest.



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You can hear it at the head of the garden, but you can't see it. Large boulders obscure any clear view of water, and you are driven to enter a zigzag garden path to satisfy your curiosity and find out what the water is doing amid all the trees and greenery.

Inside the wooded area, it's all about *control*: mastery of where the water flows, of how it sounds, of its volume and speed, of the width or narrowness of its channel, of the materials and artful surfaces over and under which it moves and how these design decisions color our perceptions. Ultimately, we're invited to see the composition as symbolic of human interaction with water and the hydrological processes that make life possible in the desert vastness of Los Angeles.



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## The stream

becomes a swift, shallow river as it bisects the zigzag garden and then ends with a whoosh, crashing down a stepped spillway into a maze of tautly manicured hedges. It completes the imagery of human control of the environment in the most elegant of terms – a sculpted basin on a hilltop overlooking the architectural sprawl of the Los Angeles Basin below.

To get close and enjoy the basin itself, you must follow another zigzag path, this one curved rather than linear – but this time, the transit takes place in bright, open daylight rather than in the cool shadows of the trees (as occurs upstream, closer to the wellspring).

Irwin adds a final element of control here, using a set of standing stones at the foot of the cascade to slow the water and attenuate its flow as it moves into the garden maze. As you watch the cascade spread out in tiny, almost indiscernible ripples, it's difficult to avoid thinking about the trickle out of the well on the upper plaza and how water moves through the system to create variously compelling effects of sight and sound.

It's a magnificent, three-part composition – and the most engaging of the must-see features of this new Los Angeles landmark. **WS**









# Amazing

# Grace

By David Tisherman

Fallingwater is one of the world's most photographed and studied residences: Frank Lloyd Wright's sublime and inspired interweaving of architecture, forest and water has a grandeur that has never been matched in the more than six decades since its completion. Here, watershape designer and Wright enthusiast David Tisherman salutes this remarkable achievement and the man who redefined architecture for the 20th Century – and beyond.

It's one of the most famous buildings in the world, but few people know that Frank Lloyd Wright designed Fallingwater in a matter of hours.

In 1935, when Wright first received the commission to design and build a vacation home for Pittsburgh retail tycoon Edgar J. Kaufman and his family in Mill Run, Pa., he didn't get to the project right away. After several months of preliminary discussions and delays, Kaufman decided to force the issue, telephoning the architect and saying that he was going to visit Wright's studio to see what had been done.

It was at that point Wright decided he'd better design the house. He had a weekend.

The construction process was no more direct, but it took longer. Work began in 1936 and was completed by 1939 in a series of costly fits and starts. The project was originally set to cost in the neighborhood of \$40,000, but the final tally rose to nearly ten times that amount – not inconsiderable in post-Depression America.

The result of the dramatic (and, at times, traumatic) process of design and construction is nothing less than one of the greatest achievements in American architecture, a work so compelling that it never stops challenging us to comprehend and embrace the lessons and wisdom it embodies.

## Dramatic Deviations

Although scholars and designers have long regarded Fallingwater as a quintessential example of "organic" architecture – the philosophy of design most closely associated with Wright's legacy – the project in many ways defies Wright's own convictions and conventions.

The house, for instance, ended up situated *opposite* the place Kaufman and Wright initially thought it should be – at a spot on the other side of the river, overlooking the waterfall. That approach would have been completely con-

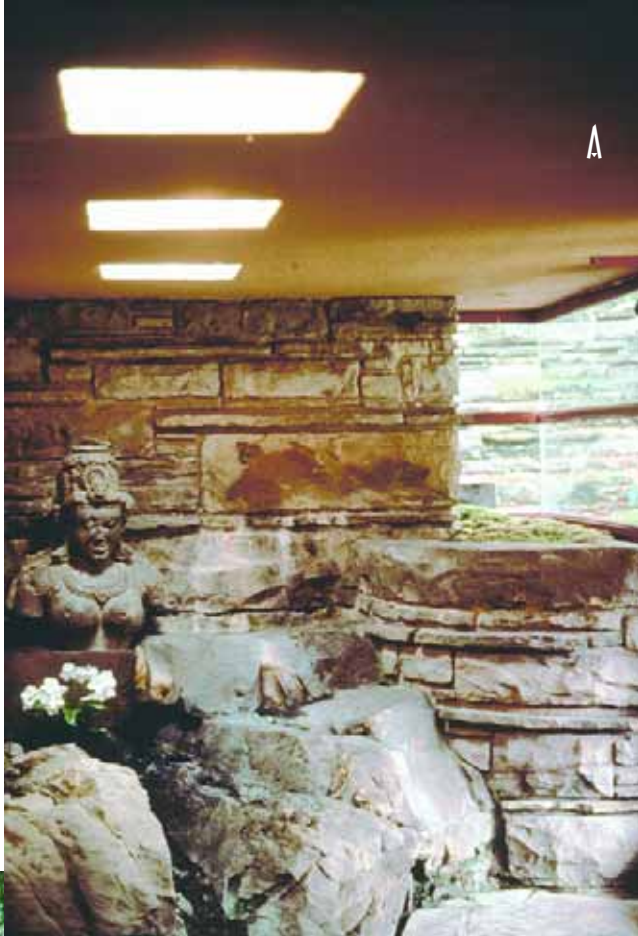
Photos courtesy Western Pennsylvania Conservancy











A

sistent with the precepts of organic architecture.

Wright, however, chose to do otherwise: He moved the home to the other side of the river and incorporated it into the river itself, a radical idea even for an architect of Wright's stature and reputation for innovation. And it turned out to be an historic choice: I'm convinced that had he stuck with the original plan and built the home adjacent to the river, Fallingwater would never have become so well known, admired or beloved.

What's so remarkable about this project to my mind is that it represents a master architect working *completely* outside the box. He looked well beyond what made sense, even from his own philosophical and practical perspectives. It was with good reason that many of



Fallingwater has two dramatic entrances, both of which incorporate water. One takes you through a conventional doorway (A), where you encounter a statue, the rock outcropping on which it sits and a small flow that seems to issue from the outside, seeping through the walls and into the space. The other, which isn't used by visitors today but must have been used by the Kaufman family and their friends (B), can only be accessed by wading through the river to a landing that literally floats over the water.



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his contemporaries considered him a screwball, even a rogue, but it's people like Wright – people who are willing to defy convention – who ultimately create the most original designs.

In the case of Fallingwater, it wasn't merely the aesthetic values that were considered crazy: When construction began, everyone – including reputable engineers and many of Wright's peers – said the building couldn't be built. From its precarious position over the river to the dramatic cantilevers that do more than simply *appear* to defy gravity as they jut into space, this structure was so ambitious and unconventional that no one was sure it could stand under its own weight.

Although today, more than 60 years later, some structural problems have developed with the cantilevered decks, it's fair to say that Wright proved them all wrong. The structure appears to float above the cascading waterfall in what can best be described as an almost hypnotic harmony with the surroundings.

The degree to which structure and river are integrated is perhaps best observed from inside the home, looking down the stairs from the living room to the river landing below. Because of the direction of the water flow, the river literally enters the home as a steady breeze that both cools the space and brings with it all of the sounds and scents carried by the water. One view here looks right down the stairs to the water (A). The other reveals the context of the opening and gives a sense of the colors and textures Wright used to weave the design into its surroundings (B).



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## Artful Balance

The house stands approximately 30 feet above the rock ledges, but the height is masked by the horizontal geometry of the cantilevers. Vertical elements of the design echo the structures of surrounding trees, and the work also makes great use of natural earth tones, with reds, creams and browns drawing on the beauty of the soil and the river bottom.

So although it's a departure in many structural respects, the remarkable use of natural forms, textures and colors here is vintage Wright.

When I look at Fallingwater, I'm also struck by the use of wood as a structural element and an interior finish material. Wright often said that wood was his favorite material because of the grain patterns and the warmth it conveyed. Another great example of Wright's penchant for borrowing from nature is the use of dry-stack stone: The linear design mimics the striations and geological forms found in the sedimentary rock seen all around the property.

The joinery and juxtapositioning of materials used to achieve these forms is also truly wonderful. The attention to detail in the way the materials are used and joined is key: Every element — dry-stack stone, brick, wooden structural members, formed concrete and, of course, the water — is carefully defined and orchestrated.



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The lessons to contemporary designers and builders are clear and compelling: When you give proper attention to materials and forms, you do a great service to the work and the client. For his part, Wright always worked to create an environment that *enhanced* the surroundings and that, in turn, was complemented by the greater environment.

This is not an easy thing to do – and he did it over and over again, in a variety of settings with a variety of structures.

Today, we see organic architecture all around us in the work of scores of designers who learned from Wright and have applied his ideas in their own ways. But because Wright was so creative in works such as Fallingwater, the Unity Church, the Guggenheim Museum and the Imperial Hotel, to name a few, he stands apart from those who followed in his footsteps.

Although there will never be anyone like him, following his example lends great quality and strength to the work of those who embrace his ideas. We see his influence, but his work is unique to him. We cannot replicate him, but we certainly can allow his genius to inform our own creativity.

## Over the Water

For watershape designers, Fallingwater has a special set of meanings, largely through its integral use of water. And it's not only the dramatic proximity to the waterfall: There's also a simple yet elegant swimming pool on the upper deck that offers its own dramatic reflections of the surroundings.

In both cases, Wright worked *around* nature and *with* nature, accommodating it and thereby respecting and accentuating it. The fact that this particular building literally straddles a river is remarkable and makes a fairly obvious statement: The structure doesn't disrupt the waterfall; instead, it draws its visual strength from it, largely by leaving it alone. The structure spreads over it, placing the visitor in intimate contact with nature at an array of key focal points.

I often make the point in my columns, articles, classes and client presentations that watershapes should be secondary, no more than respectful accents in their surroundings. To a large extent, I learned that principle from Wright, who said that we are really nothing, that nature is what's beautiful.

Too many designers – and far too many pool builders – believe you need to wipe out everything that's present in a design space and recreate the setting from scratch. By contrast, Wright uses visual/structural elements such as existing rocks and trees and harmonizes with natural forms, in a sense co-opting the beauty of nature by drawing it within his design space.

In other words, the structure becomes part of the environment rather than a form separate from it. This is a radical counterpoint from people who obliterate a setting to build within it. Wright teaches us that for all our ego and ingenuity, the work we do should be secondary.

Many of his own major influences encompass and reflect this central, organic ideal. He was heavily influenced by Native American culture, for example, and at Fallingwater, if you look carefully at details, you'll see patterns in the posts leading up the guesthouse that appear to be feathers or the fletches of an arrow.

He was awed and inspired by Native Americans' ability to coexist peacefully with the grandeur, power and spirituality of the natural world. He was amazed by the vastness of the North American prairie. He also studied the art of Japanese gardeners and the way they replicated the complexity and variety of natural environments in contained spaces.

With a distinct and wildly creative flare that functioned even under tremendous pressure, Wright encompassed all of these rich influences in this astounding work of architectural art. To my eyes, Fallingwater is a masterpiece because it is a creative innovation, yet at the same time makes a statement that is true to the vision that design can provide a harmony between man and nature. **WS**







The upper deck, with its guesthouse and swimming pool, is the hidden treasure at Fallingwater. The structures follow in simple ways the themes developed in the much larger, cantilevered main building down the slope, but the pool serves a special purpose by bringing the experience of river-like reflections to all who stayed with the Kaufmans. It also bears mentioning that the pool was sublimely integrated into the space by virtue of the fact that it was originally a fill-and-draw vessel, to be filled for use with fresh river water.



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PRAHER VALVES has published a Selection Guide to its Superstar line of backwash valves. The 12-page brochure includes technical specifications, wiring plans and dimensional drawings for five different models available in 1-1/2, 2- and 3-inch configurations. The brochure also offers information on the technology behind the company's valves and control systems. **Praher Valves**, Barrie, Ontario, Canada.

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## COLOR-CODED LIGHTING GUIDES

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NIGHTSCAPING has published a reference chart for its low-voltage lighting systems. The chart classifies systems for path lighting, uplighting, downlighting, backlighting, specialty use and underwater lighting and by lamp type, wattage and model/part numbers. Nearly 100 products are covered by the four-page brochure, which also includes information on control modules and power centers. Nightscaping, Redlands, CA.

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Continued on page 62

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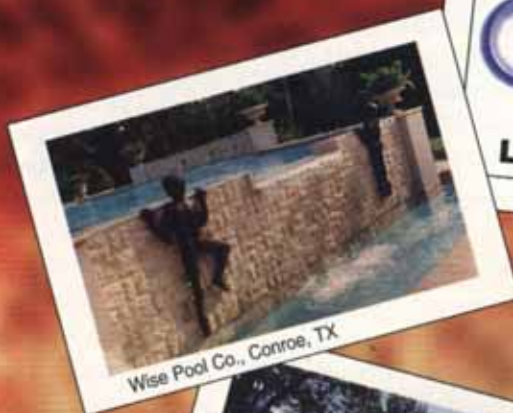
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STA-RITE INDUSTRIES manufactures the Max-E-Therm line of pool/spa heaters. Featuring rust-proof exteriors, low emissions, easy connections, electronic ignitions and lower operating costs, the heaters come in three sizes and have adjustable electronic control panels for self-diagnosis of problems, simple temperature programming and readings in either Fahrenheit or centigrade. The tanks come with ten-year warranties. **Sta-Rite Industries**, Delavan, WI.

## COMPETITION AND COMMERCIAL POOL PRODUCTS

Circle 115 on Reader Service Card

S.R. SMITH has released a comprehensive catalog on its diving boards, slides, rails, towers, life-guard stands and accessories for competition and commercial swimming pools. The 102-page booklet highlights specialty products including ladders, starting platforms, fill spouts, training/exercise bars and a variety of deck fittings, escutcheons, anchors, cover plates and bumpers designed to provide safety and manageability in aquatic facilities. **S.R. Smith**, Canby, OR.



## POZZOLONIC PLASTER ADDITIVE

Circle 117 on Reader Service Card

ENGELHARD CORP. has released a guide to application of MetaMax PA, a pozzolonic additive that reduces plaster's permeability and improves the appearance of the finished product. The additive also improves troweling and reduces finishing time while improving aggregate bonding, reducing alkali-silica reactivity and increasing chemical resistance and plaster strength. The guide offers batching information and mixing instructions. **Engelhard Corp.**, Iselin, NJ.





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## PORCELAIN DECKING TILES

Circle 118 on Reader Service Card



**NATIONAL POOL TILE** has announced the addition of porcelain decking tiles to its product line. Available in colors and patterns to match many of the company's waterline tiles, these larger-format tiles (available in sizes ranging from 12-by-12 to 24-by-24 inches) continue the natural look throughout the deck and into the home. All tiles are frost-resistant, slip-resistant, and meet all industry standards. **National Pool Tile**, Anaheim, CA.

## PRE-FABRICATED IN-GROUND SPAS

Circle 119 on Reader Service Card



**SUNDANCE SPAS** has introduced its Architectural Series. Designed to bridge the gap between gunite and portable spas, the line's two models allow for a wide range of hydrotherapy options without the difficulty that comes with trying to include those features in concrete construction. The shells have multi-level seating and 25 jets and are set up to work with a variety of architectural coping treatments. **Sundance Spas**, Chino, CA.

## AUTOMATIC CHLORINATING SYSTEM

Circle 120 on Reader Service Card



**CLEAR-TECH AUTOMATION** offers Pure & Clear, an automatic pool chlorinating system that uses ordinary salt dissolved in water to make chlorine at the touch of a button. The system features an electrolytic cell that takes care of the salt conversion as well as a controller that determines the amount

of chlorine the cell will produce. The system works for pools up to 35,000 gal. capacity. **Clear-Tech Automation**, Pompano Beach, FL.

## FOAM FOR FILLING EXPANSION JOINTS

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**W.R. MEADOWS** manufactures Deck-o-Foam expansion-joint filler, a tough, flexible, lightweight, durable foam designed to replace brittle asphalt-impregnated fillers. The product has a convenient removable portion to ensure a uniform, sealable void in the joint. The product is available in 1/4 in. thickness in 100-ft. rolls or in 1/2 in. thickness in 50-ft. rolls in widths from 3 to 48 in. **W.R. Meadows**, Hampshire, IL.

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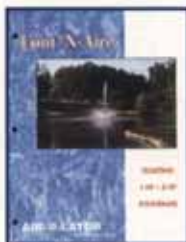
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## FLOATING FOUNTAINS

Circle 122 on Reader Service Card



AIR-O-LATOR has released a brochure on its Font® N-Aire line of floating fountains. The eight-page booklet covers company history and the technology behind the products, offering detailed performance data on two spray patterns for five models with propeller pumps and on six spray patterns for five models with centrifugal pumps. Complete specifications and guidance for mooring and making electrical connections are also included. **Air-O-Lator**, Kansas City, MO.

## FIBEROPTIC LIGHTING BROCHURE

Circle 124 on Reader Service Card



PENTAIR has published a four-page brochure on the Fiberworks lighting system for pools, spas and landscapes. Intended for installation by trained professionals, the system is designed for efficient light transmission and distribution, delivering illumination up to 85% brighter than other systems. It also offers seven colors and includes side-illuminating cables that bring dramatic accents to pool perimeters. **Pentair**, Sanford, NC.

## POOL-DECKING MATERIAL

Circle 123 on Reader Service Card

MORTEX MFG. CO. supplies the Marquee line of pool decking and pavements. Designed to handle temperature extremes, the product is specifically designed to defy cold weather and resist freeze/thaw damage while staying far cooler in hot weather than ordinary concrete or toppings. The non-slip coating is available in 11 colors including brass, mocha, silvertone and sunset rose. **Mortex Mfg. Co.**, Tucson, AZ.



## SALT-WATER CHLORINATOR

Circle 125 on Reader Service Card

ECO-MATIC offers an alternative to the use of packaged chlorine through an electrolytic process that converts common salt into sanitizing chlorine. The system controller is connected to the same power source as the pool pump and regulates the electrolytic cell to keep the water safe, crystal clear and free of any bacteria, viruses or algae – without any residues or unwanted by-products. **Eco-Matic**, Newport Beach, CA.



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## INTERACTIVE WATERPLAY COMPONENTS

Circle 126 on Reader Service Card



CRYSTAL FOUNTAINS offers the Splash 'n' Play line of interactive waterplay components, including the NLG series of ground jets. The cast-bronze NLG jets are set into spray aprons in public playgrounds to provide a gentle spray that can be controlled and timed to provide varied play opportunities for children. The four models shoot jets of water at different angles or combinations of angles. **Crystal Fountains**, Concord, Ontario, Canada.

## PUMP FOR HEAVY-BODIED COATINGS

Circle 127 on Reader Service Card

QUIKSPRAY has introduced the Carrousel Model #15010TBM-3-GAM pump for spray application of heavy-bodied shotcrete and pool coatings. The pump uses the peristaltic principle for moving aggregated products, so no internal, moving parts come in contact with the material—hence low maintenance. The variable-speed pumping capacity ranges up to 2 cubic yards of material per hour. **Quikspray**, Port Clinton, OH.



## HIGH-FLOW POOL PUMPS

Circle 128 on Reader Service Card



WET INDUSTRIES manufactures the W-A series of pumps. These high-performance, high-flow units feature an oversized hair and lint strainer with a see-through lid; exclusive top or side discharge outlets; bronze volutes and impellers for long life;

and energy-efficient operation. The pumps come with five-year warranties and are available in five sizes from 1/2 to 2 hp. **WET Industries**, Piru, CA.

## STACKED-STONE JUMP BASES

Circle 129 on Reader Service Card

INTER-FAB offers the Manor House Stone collection, a line of manufactured rock that includes new platforms designed and engineered to serve as jump-rock bases. Made for use with 6-, 8- and 10-foot diving boards, the bases are designed to simulate hand-laid, stacked stone and enable builders to achieve a polished, popular architectural look with less than an hour's labor. **Inter-Fab**, Tucson, AZ.



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## MOSAICS FOR POOL ENVIRONMENTS

Circle 130 on Reader Service Card



**ARTISTRY IN MOSAICS** offers standard mosaics to go along with its custom-design capability. The Pool Pals line of handcrafted ceramic tiles are designed to highlight small details including steps or swim-outs – or to provide a spectacular aquatic scene to cover the floor and walls. Patterns include aquatic life from dolphins and sailfish to turtles, seahorses and mermaids. **Artistry in Mosaics**, Fort Pierce, FL.

## ACRYLIC DECK SYSTEM

Circle 132 on Reader Service Card



**INNOVATIVE CONCRETE TECHNOLOGY** has released a brochure on Texture-Krete 2000, an acrylic deck system that is cool and comfortable to bare feet, slip and stain resistant, virtually maintenance-free and comes with a five-year warranty. Approved for commercial use, the material is available in 18 standard colors (including pastels and accents). **Innovative Concrete Technology**, Lakeland, FL.

## GARDEN FEATURE CATALOG

Circle 131 on Reader Service Card



**HADDONSTONE (USA) LTD.** has released new literature on its expanded range of Arcadian Garden Features. Additions to the line include fountain pools with centerpieces ranging from ammonites and lotus flowers to spirals and obelisks; self-contained fountains from wide and shallow to tall and narrow, wall fountains and a range of pool surrounds and liners designed for fountains. **Haddonstone (USA) Ltd.**, Bellmawr, NJ.

## SAFETY POOL COVERS

Circle 133 on Reader Service Card



**AQUAMATIC COVER SYSTEMS** offers a six-page guide to its line of safety pool covers, including the fully automatic Hydramatic model, which is available with 11 standard fabric colors, and the manually operated EZ Cover, which comes in two standard colors. Deck-top, flush and under-coping mounting-track systems are available to cover pools of all shapes. **Aquamatic Cover Systems**, Gilroy, CA.



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## PLASTIC PIPE CEMENT

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UNITED ELCHEM INDUSTRIES offers Polar-Weld Series 2600, a plastic-pipe cement designed for ease of application at cold temperatures. Suitable for use with all types and classes of PVC pipes and fittings, the NSF/UPC-approved cement doesn't thicken significantly as temperature decreases and has good brush-on characteristics even under sub-freezing conditions. **United Elchem Industries**, Dallas, TX.

## AUTOMATIC POOL COVERS

Circle 136 on Reader Service Card



COVER-POOLS offers a full-color brochure on its Save-T Cover II automatic safety pool covers. The consumer-oriented information is designed to inform prospective cover owners about the company, its capabilities and the specific features of its automatic covers. It also provides information on power options, architecture-friendly features, fabric colors, control systems and custom orders. **Cover-Pools**, Salt Lake City, UT.

## POLISHED POOL FINISH

Circle 135 on Reader Service Card

AQUAVATIONS has published a brochure on Hydrazzo, a system that combines the durability of exposed-aggregate surfaces with the silky feel of hand-polished marble. The result is a smooth, non-skid and virtually impermeable surface that resists spot etching, chemicals, stains, permanent scale and algae adhesion. The material is available in a range of colors, from a pale Gulfstream Blue to a deep Maui Midnight. **Aquavations**, Coral Gables, FL.



## LOADERS AND EXCAVATORS

Circle 137 on Reader Service Card

BOBCAT has published the Summer 2001 edition of Worksaver, a quarterly booklet about jobs performed by the company's skid-steer loaders, compact track loaders compact excavators and more. Highlighted in this issue is information on the manufacturing of the 500,000th Model 773 skid-steer loader, with details on its basic features and its application in a variety of tasks including landscaping. **Bobcat**, West Fargo, ND.



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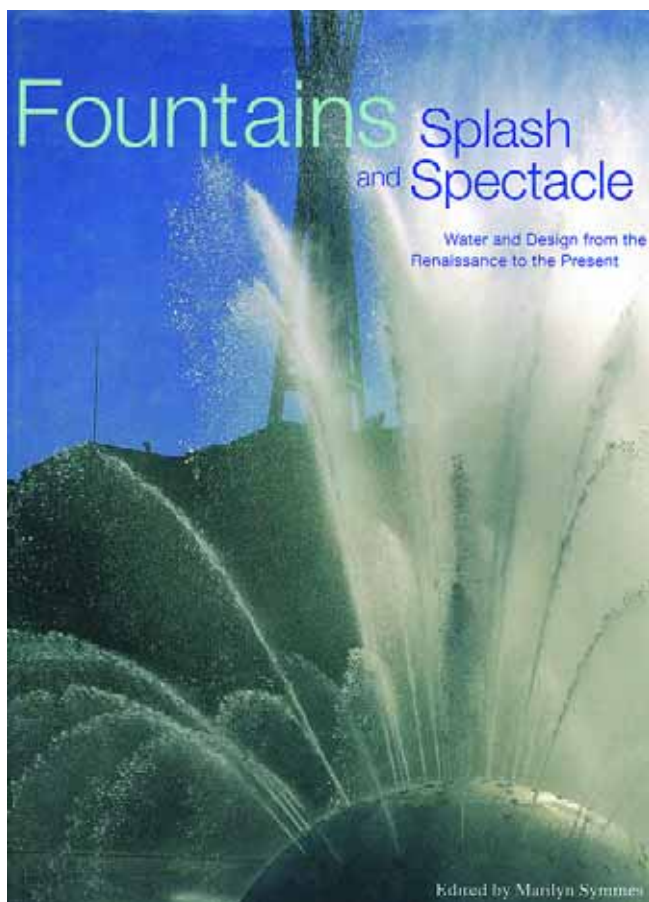
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## Making Spectacles

For anyone designing decorative water, *Fountains: Splash and Spectacle* is a wonderful and useful resource. This wonderfully illustrated anthology of essays on classic fountains (edited by Marilyn Symmes and published in 1998 by Rizzoli International Publishing, New York) deftly encompasses the range of fountain designs from antiquity to modern day.

From the modest Alhambra in Spain to Chicago's dramatic Buckingham Memorial, Symmes and the book's contributors weave together scores of detailed examples illustrated with beautiful photos and, in many cases, supported by sets of plans, drawings and diagrams used in creating some of the world's most beautiful and historic watershapes.

Rather than approach fountains in a purely chronological or geographic context, the book is organized into eight chapters covering groups of fountains based on their practical and thematic purposes. The roles of fountains in religious institutions

and public spaces and for historic commemorations are examined, for example, as are fountains designed strictly for pleasure and entertainment.

The titles of the chapters tell us much about the major trends in fountain design. The first chapter, "Fountains as Refreshments," reaches back to the Roman Empire and Moorish Spain to examine how fountains originated as sources of public water. It traces this heritage through to the emergence of fountains in the Americas as sources of potable water for people and livestock through colonial times and subsequent westward expansion.

The next chapter, "Fountains As Metaphor," shifts gears completely as the writers delve into the early use of fountains in places of worship from cathedrals to mosques and then shifts over to secular expressions of power and water's use in conjunction with prominent public ministries and the residences of royalty and other heads of state.

The panorama of fountains discussed in this volume is truly awesome. From great monuments such as the recently completed Franklin Delano Roosevelt Memorial Fountain in Washington to the water spectacle in front of the Mirage Hotel in Las Vegas, fountains are seen as a form of expression with the potential to create meditative and inspirational spaces as well as scenes of spectacle and delight. There's also a lengthy discussion of the wonderful fountains of Kansas City, Mo., which is known as the "City of Fountains." (For more on these fountains, see the pictorial beginning on page 32 of this issue.)

Along the way, the book does a marvelous job of tracing the lineage of fountain design and demonstrates by example how an idea from one era or physical context can be (and often is) neatly translated to another. There are wonderful descriptions of grand design successes as well as breathtaking failures, along with careful examinations of astounding technical innovations, from the advent of the hydraulic pump to the application of computers to watershaping.

For my book-buying dollar, this volume offers a most useful history of fountain-craft – along with a treasure trove of valuable ideas. **WS**

*Mike Farley is a landscape architect with 20 years of experience and is currently a design/project manager for Leisure Living Pools of Frisco, Texas. He holds a degree in landscape architecture from Texas Tech University and has worked as a watershaper in both California and Texas.*



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