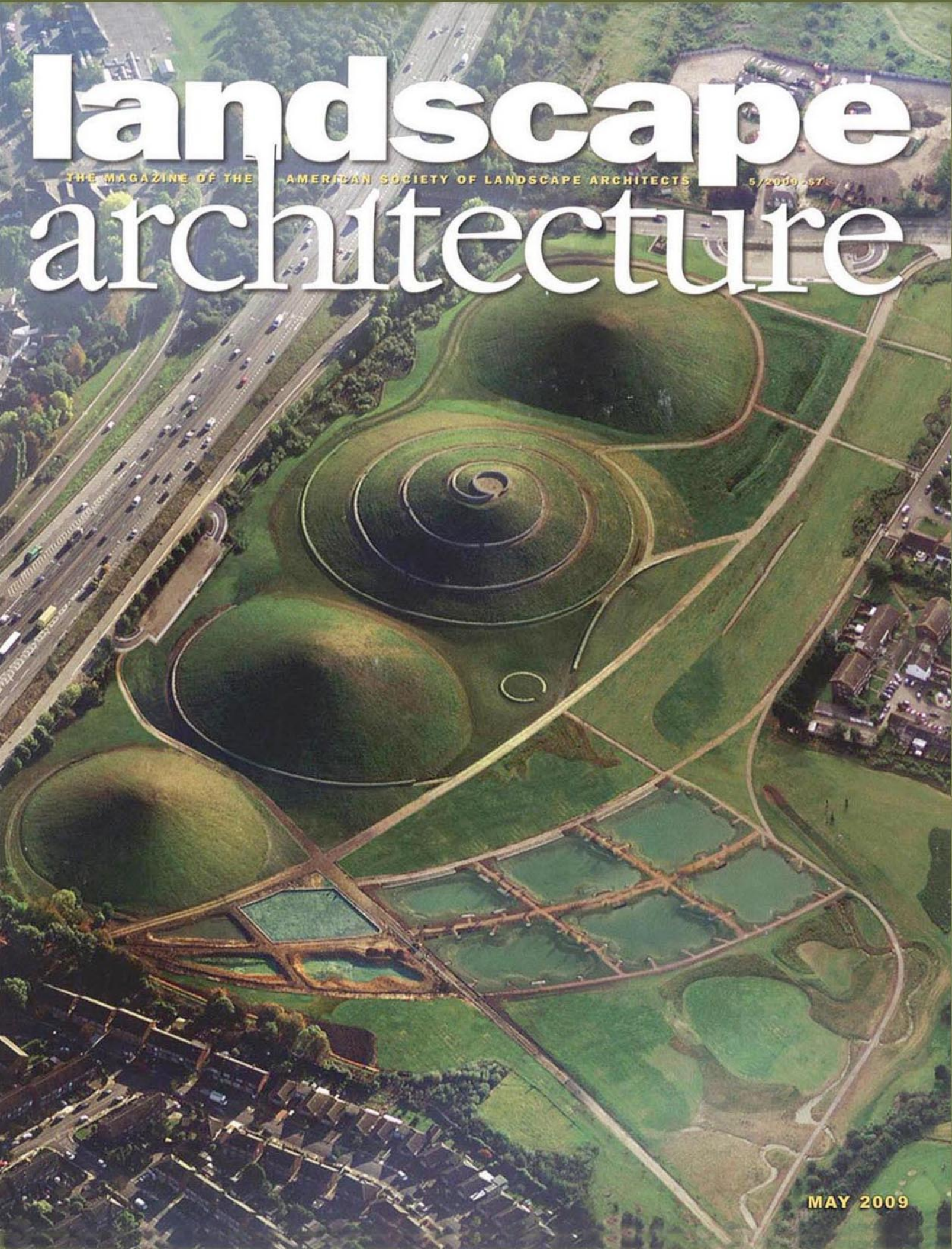
# landscape architecture

THE MAGAZINE OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS 5/2009 • 57



MAY 2009

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THE MAGAZINE OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS

Torre explores ideas through eye-level sketch studies and his signature tilt-up aerial drawing technique.

# DRAWN TO DESIGN

## Ace Torre, FASLA, sketches as a catalyst for ideas.

By James Richards, ASLA

A 30-MINUTE CONVERSATION with Ace Torre, FASLA, can be exhausting. The 61-year-old designer leaps with boyish enthusiasm from worldwide conservation issues to French philosophy to the intricate details of a building roof. But at some point, words aren't enough to communicate the complexities of his ideas. Then, he draws.

Drawing is a common thread that knits together Torre's way of seeing, thinking, and practicing across several complex areas of endeavor. He is a registered landscape architect, an architect, an interior designer, and a city planner who has distinguished himself as one of the foremost designers of modern zoos in the United States, and he has a broad portfolio of award-winning parks, waterfronts, and urban revitalizations as well. He is a gifted musician who once pursued a career in rock and roll, as well as an author who paints, sculpts, and designs furniture (and his own residence) for good measure.

How did the one-time New Orleans keyboardist become fluent in such a range of creative disciplines? "I love to draw," he says.

Torre began his career as the founder of the urban design department within the New Orleans Planning Commission, bringing design thinking and his gift of drawing to the political agency's vision of the city. After leaving government to study in Italy as a Rome Prize recipient, he worked as a designer in architectural production firms and eventually became a partner in a landscape architectural practice that after years of evolution and a buyout exists today as Torre Design Consortium.

Along the way he invented his own unique approach to design drawing, which he termed "the tilt-up technique." In his 1986 book *Site Perspectives,* he describes it as "a free-form combination of aerial, axonometric, isometric, and one-point perspective" that lays back building walls and site elements to expose all for design study. These epic drawings are

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quickly constructed to scale on trace over the rough plan view, and they allow design exploration of hardscape, plantings, architectural facades, and spatial relationships simultaneously. It's a particularly potent tool for the many complex facets of zoo design, especially when the designer is thinking concurrently in the capacities of architect, landscape architect, and interior designer.

For any given project, Torre's tilt-up view is supplemented with a staggering number of loose, freehand cross sections and perspectives that, through many overlays and refinements, fix the details and character of the vision. Many of these loose drawings find their way into the digital construction documents, allowing contractors to clearly see his design intent.

After visiting Torre's office in a former historic schoolhouse on Magazine Street in New Orleans, I became anxious to share Torre's unique approach to drawing and practice with a new generation of designers. Torre and I sat down for a rambling series of conversations over two days in February.

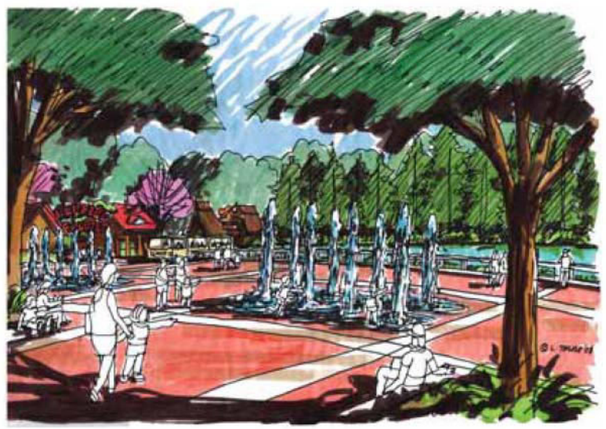

**J.R.:** There are a ton of drawings in here!

**TORRE:** We've done 35 zoo projects. I have probably 5,000 sketches. Some are loose; some are refined. Some big, some small.

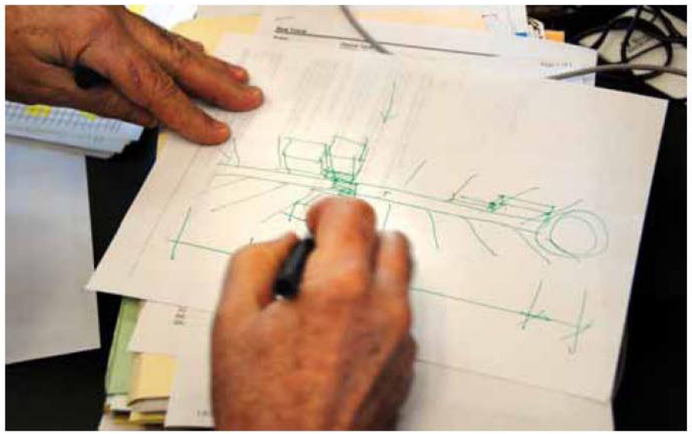
**J.R.:** Freehand drawing is a big part of your working style and your firm's identity. That's increasingly rare even in design offices. Why do you draw?

**TORRE:** Because I love to draw. It's a vehicle that allows exploration. If you can't draw it and see it, it's impossible to think it through. And if your intent is to work on a project that requires other people to understand your vision and you can't draw it so that they understand it, it's impossible to go further into refinement. So it's a powerful tool, but it's only a tool if you like to draw. A lot of people are intimidated by starting. They expect a masterpiece when they start out. A lot of the drawings I do are no good. But the exercise that I went through to create them, to think about them, and to discard them is still a positive process in arriving at the ultimate design solution. And there's a continuum in this office that if the idea is strong enough, it goes through another iteration and another iteration and eventually finds its way into the final electronic production set as a freehand drawing.

**Torre's quick study sketch captures the designer's first thought for an entry plaza, *left*. The eye level of the perspective is raised to allow a view of the swamp beyond. Proportions and perspective are refined through trace overlays, *below left*. The final sketch, *below*, is still loose enough to encourage client feedback.**



ACE TORRE, FASLA

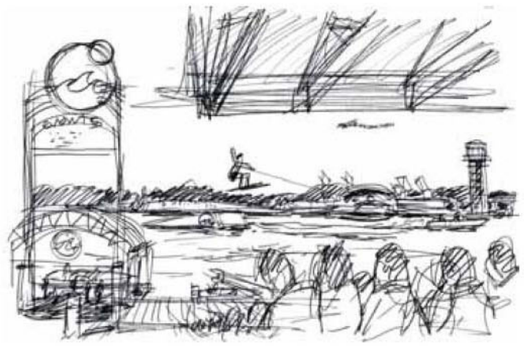


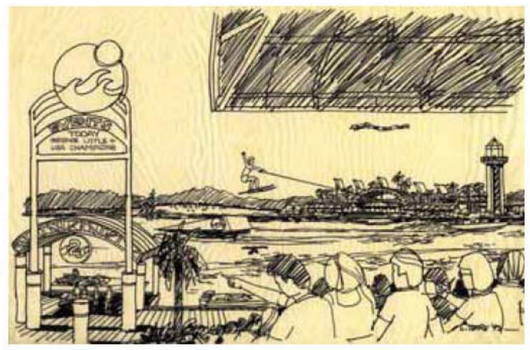
**Torre created his first tilt-up drawing, *above*, out of a need to explore the complex urban relationships of New Orleans's St. Charles Street in three dimensions. The approach won a major competition for the design commission. Torre explains and re-creates the thought process of multiple vanishing lines for the St. Charles Street sketch, *left*. His initial sketch, *bottom left*, tries to capture the "feel" of the project. As the sketch evolves, *bottom right*, ideas for architecture, theme, branding, and distant landforms are explored.**

**J.R.:** You're probably the most prolific sketcher I know in any discipline. Is sheer volume of drawings part of how you work through the creative process?

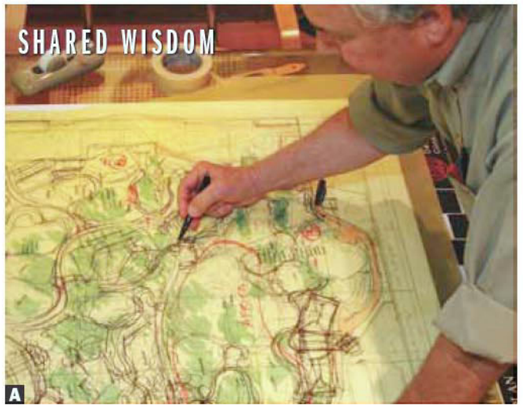
**TORRE:** I believe more is better. I have to do that volume to really see what it looks like and then show people what I'm trying to create so that they can react and modify it. So the volume is a result of the process.

I also believe that more is more accurate and informative. You can see the nooks and crannies and twists and turns of a design if you know, at the turn of the century, the educated man had to be able to draw. If you couldn't draw, you weren't truly considered an educated man. Nowadays, those of us who like to draw, draw. A lot of people look at it as tedium, and they only use it when they have to—you know, you do a plan and you have to do the obligatory two sketches. Then the value isn't much because you've already set everything in position. But in our case it's an iterative process back and forth, using drawing as a tool to explore rather than to justify or clarify what you already did. I think that's a big difference.





ACE TORRE, FASLA, DRAWINGS; JAMES RICHARDS, ASLA, PHOTO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**The process for creating the plan is outlined on this page and opposite: (A) After reconciling survey information with a planimetric aerial base, Torre sketches through plan ideas at 40 scale. (B) Revised ideas are taped into place to avoid redrawing. (C) Building footprints are highlighted in red to keep critical lines visible through successive overlays. (D) Torre adds color to the preliminary plan view.**


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you draw your way through it. If you do a plan and then you do the requisite three illustratives, you probably pick them based on what you think the key points are. But you know, there may be 1,000 important points that constitute the overall experience. Then 50 sketches is going to be better than three, right?

**J.R.:** Well, when your contract calls for three drawings and you're doing 50, obviously speed is a factor. So how did you learn to work fast?

**TORRE:** The way I do things came to me by being a student at Louisiana State University (LSU) while playing music as a professional four or five nights a week in New Orleans. I didn't have a lot of time to ponder, you know? So you heard what you had to hear in class, came down and played music, went back to school early. And you attacked the drawing. While people were still taping it down, putting a border on it, thinking about it, I was already halfway through the project because I didn't have time. And it turned out to be a great asset to be able to push through and get stuff down and to realize that hey, even if it's scribbled, it's something; it's a start. And from the scribble you can do layers and refinement, modify it, and so forth. Just getting started was so important. If you end up throwing the whole thing away, you've still made progress. As long as that sheet's blank, you've done nothing.

And I believe that great French adage that "your first idea is probably your best." If you can get it right the first time, or get it right enough as in there are no finite, black-and-white solutions to any design problem, and if you feel good about it once it's executed, did you really need six weeks to work on it, or could you have done it in three days? And I do like the intensity of just jamming it through. So for better or worse, it's the way that I do it. It's what allows a relatively small firm to do what other firms need a lot more people to do. I find it's a really great solution.

**J.R.:** When do you first remember drawing?

**TORRE:** When I was in grammar school. A buddy of mine and I got out of a lot of classwork by doing murals (laughs). I remember we did a mural of Egyptian temples with Pharaoh's army riding horses. They filled the whole wall—he'd be on this side and I'd be on the other, we'd discuss a little, and we'd work to the center.

In high school I got into drawing automobiles so that the racing slicks looked like black rubber, and the chrome had the right reflection. But when I got to LSU, I was lost for the first few projects because I didn't understand the drawing vocabulary for landscapes. So I tried to invent my own vocabulary and wasted a lot of time.

**J.R.:** Was there an "aha" moment when you "got it," or was it more a matter of developing the skills and drawing vocabulary over time?

**TORRE:** It was when my professor Max Conrad, FASLA, brought me Ted Kautzky's *Pencil Broadsides* book. I probably spent a month duplicating every drawing just to see what it would feel like. I eventually learned that there were these icons used as a vocabulary that when assembled created a great sketch that looked like a landscape architectural drawing. And once I got the hang of it, I really loved that approach.

When I used to teach drawing, I'd make the students trace for the first month. Pick a style that you like and trace it so you can physically feel the hand strokes and what it takes to create it. That exercise pushes it backward into your brain, and as a result you have a base vocabulary to make things happen. You know, when you play the piano there's a certain feel to the keys. It's the same process in drawing. If you can get a vocabulary and physically understand what it takes to make these marks and icons that when assembled make a sketch, it puts you much farther ahead than if you were trying to invent your own vocabulary. You can kill yourself that way. It would be like trying to invent your own language every time you meet somebody. You'd wear yourself out; nobody would understand you and you'd never make any progress.

**J.R.:** How did you develop the tilt-up technique?

**TORRE:** Like everything else, out of necessity. It came out of the St. Charles Street design competition. I laid it out in plan view, and it was all square building footprints and rectangular streets and circles that were going to be trees. I looked at it and said, *"I don't even know what this is going to look like."* So I envisioned it in perspective as a whole street scene, but rather than everything coming to a single point I took a Pentel and taped it to a yardstick and created multiple points, laying the building facades back. Since it was drawn to scale, I saw for the first time that these blocks are all small historic buildings. And these others are larger, more urban scale downtown buildings, and soon four zones and a radical new element to tie them together start to evolve just based on peeling these facades back.

At the time I just did it and then thought about it later. Sometimes you use your intuitive sense and just do it, and if you're pleased with it, you go back and think about it and figure out what worked. Then it's a tool.

**J.R.:** It seems to work particularly well in zoo design. You've got so many issues that you're trying to think through, starting with values and the conservation message, deciding how to translate that into a visitor experience, then translating that experience into form....

**TORRE:** We always start with the fact that everything on the earth is interconnected. So how do you tell stories that help people understand why critters have spots or stripes or why they're big or small, climb or swim? It's usually based on the complexity of a globe that has differential heating because it's a sphere that has wind patterns that create vegetative habitats that create geographic issues. It's hard to tell a story without getting into the whole and why it's like it is.

Our concept for the Northwest Passage at the Memphis Zoo began with a scribble of what the journey would be like. And from there it went to diagrams that tilt up visualizing how it works, and I did a whole slew of sketches. The cool thing is that it's a journey, not only geographically, but in time. You know, the last land bridge of the Ice Age was 10,000 years ago. That bridge led critters to come to North America; people followed and that then led to the creation of different nations of people as groups. So this is as much about the history of the United States as it is about the animals. An ice age befalls us, patterns change, people move, and a whole new nation is born. Then comes this genius, Chief Seattle, who tells Congress in 1854 that man didn't create the web of life, he's merely a strand in it, and what he does to the web he does to himself. He moves on, and we won't pick up that idea again for 120 years.

So as you go through the exhibit, you're actually moving across the land bridge and across time through 3,000 or 4,000 years of change that leads to at least four cultural entities. Journeys like this link different forms of vegetation, different critters doing different things, different ecological interrelationships. Our work takes the visitors and puts them there. Not just to look around, but to show them a sequence of events that explains why things are the way they are. And if it's a really great exhibit, in the end you move somebody.

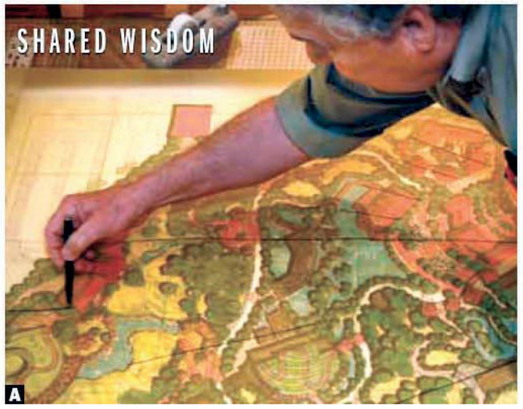
**J.R.:** Tell me about the role of drawing in your personal creative process.

**TORRE:** I work with a lot of groups. So I'm sitting with 10 people, and there's a blank sheet. They don't know what it's going to be. I don't know what it's going to be. At that point you have to draw. And what's really different about what we do rather than what engineers, attorneys, and other people do is we can create the magic of a visual image. Even just running a cross section and drawing your little scale person, showing where the sight line is—that's just magical. It also helps them see what direction you're moving in. So it's a great tool. And the reality is, I can't see it until I draw it.

**J.R.:** You don't see it finished in your mind first?

**TORRE:** No; there might be some kind of concept or thought process there, but to see if it works or not you have to draw it, and then you have to draw it to scale. Look at those wonderful drawings by Leonardo da Vinci—the way he takes something and cuts it apart and then analyzes it and rotates it and explores how it hooks onto another gizmo. It's just great! But he had to draw it to understand it and to demonstrate what he's thinking to somebody else.

The other thing that I really love about drawing is when something evolves that you didn't think was going to happen. You had no idea. It's like a resulting force. You explore this, then that, and what eventually comes, you didn't anticipate. That's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what everybody's looking for—that's the magic of discovery.

**J.R.:** So how do hand drawing and computer work interface in the office now?

**TORRE:** As an evolution. Doing that stuff on the computer early on takes more time to set it up and get it going. Of course once you have it set up, you're on your way. But at the schematic level, you're at your loosest, most amorphous experience; it's part of the search. So we'll do all the initial exploration in freehand. Even the plan is done in freehand with the spot grades. Once we've got the first iteration approved and we think we have a good thing going, then we actually transition to electronic production. I do miss that our office doesn't look like a design office anymore; it looks like an insurance company with a bunch of people sitting at computers. I loved it when there were big drawing tables and drawings hanging off the side.

**Having determined the most advantageous angle from which to construct the tilt-up drawing, Torre overlays the plan view with trace and draws the central "vanishing line" perpendicular to the bottom of the sheet. This line's placement is important as the viewer's eye will be drawn to this part of the finished sketch. (A) Radial "vanishing lines" are drawn from vertical edges of important plan features toward an imaginary vanishing point off the bottom of the sheet. Lines are adjusted slightly from true perspective as needed to allow for the most informative view of vertical features such as building facades. (B) Using vanishing lines as a guide, the first vertical lines are projected up from building corners to begin to create a 3-D effect. The vertical lines are drawn to the same scale as the plan view. (C) More buildings are "popped up," their angle guided by the vanishing lines to simulate an aerial perspective view. Unlike a true aerial perspective, vertical elements are drawn to scale, allowing the designer to explore concepts with true dimensions as the drawing evolves. (D) The red lines are an aid to make the vanishing lines more visible for the reader.**

I find it very interesting that there are a lot of programs to make electronic drawings look like hand drawings. In the old days, hand style, line weight, the way you articulated the line you drew—if somebody had talent, the drawings were good. If they didn't, they were bad. With electronic production, drawings are good, period. So you have to look further to see what's inside the drawing, because they can be incorrect or misleading. Even with an electronic montage you can have scale problems because people don't understand the concept of the horizon line. It's so easy but I'll see electronic mock-ups that are all wrong; it's a matter of not understanding how perspective works.

**J.R.:** Do you do all the hand drawing?


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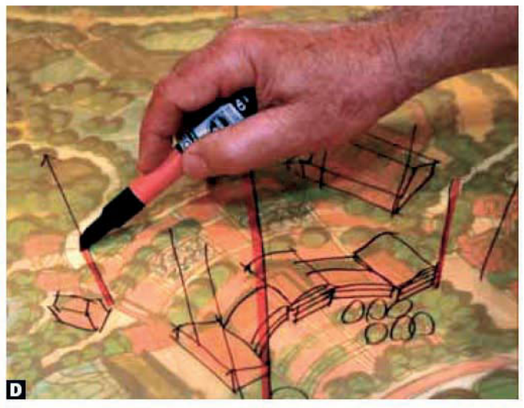
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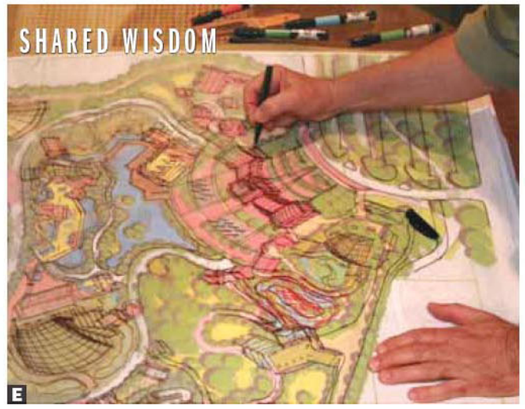
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**TORRE:** I do all the illustrative design drawing. As we refine the project, my staff will do important hand drawings to discuss prior to producing them electronically. Speed is a factor as well. I can blaze through a concept pretty quickly and do a whole lot of drawings where someone else might just be getting started; otherwise we'd have to have more people. So we run a pretty efficient machine based on this iterative process we've developed.

**J.R.:** Your drawings and your built work have a robust feel to them. Does your drawing style influence the design, or does your vision of the finished design dictate the drawing style?

**TORRE:** Neither. But I guess if it's working like it should, the way the first drawing feels is how the built project ends up feeling. Maybe it won't look exactly like this, but it should feel like this. I think that's what you're going for.

**(E) The 3-D tilt-up takes shape as more elements are extended vertically, using the "vanishing lines" as guides. Rough perspective studies are used as a design tool for the evolving drawing. (F) A revised tilt-up concept for the lodge building, based on a quick eye-level perspective sketch study, is taped into place. With all revisions in place, a final overall tracing can be created. (G) After the final overlay is created, the completed tilt-up is printed and color is applied. Shadows for trees, buildings, and other vertical elements are a key to creating a convincing 3-D effect. Torre draws shadows horizontally, parallel to the bottom of the sheet. (H) A close-up view of the entry complex reveals details of both plan view features and vertical elements, including architectural facades. The subtle green grid indicates one-acre squares. Each acre represents an average $4 to $9 million in investment, providing designer and client with a visual budgetary tool for discussion.**

**J.R.:** I've written about the speed advantages of working very small. You, on the other hand, work very large.

**TORRE:** I think it takes the same amount of time to draw a large drawing You do have more real estate to cover, but if you're moving quickly, and you're not afraid to just blaze through it, and you're working with a pen like a club rather than in a refined position, it's a great way to work.

Large size is also good for drawing with the client. If you want to have somebody be part of the process, put the tracing up and draw it with them there. Maybe they can't draw, but they feel they're really influencing the design because they're there while it's actually being shaped. It has a whole different impact than if you showed up with a big slick presentation and you're asking them to sign off on it as the best thing since sliced bread.

**J.R.:** You've said that a tremendous

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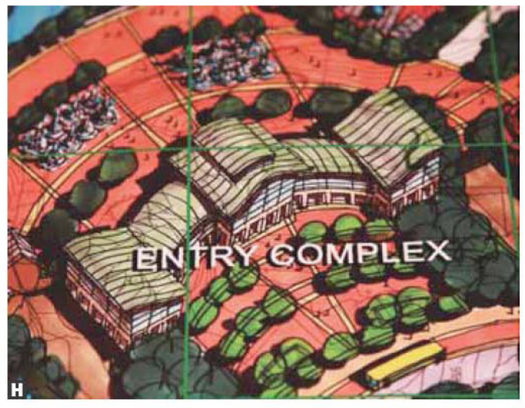

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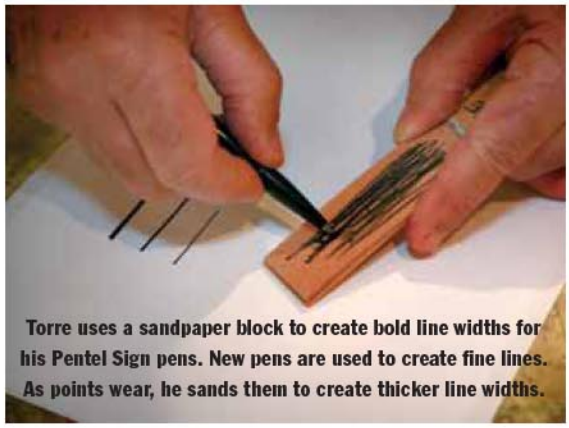
amount of design personality could be developed through drawing skills.

**TORRE:** If you look at a lot of drawings, you can see or maybe feel the personality of the person who did it—the way they textured it, the lack of texture, the freedom of the strokes—so whether somebody's tightly wound or a free spirit, they portray their personality in their hand. Now it's different in the electronic age because that's an aggregate of different attributes that you locate from different places and assemble. So it can hide whether you are loose as a goose or tight as a clock. But in hand drawings, you can see personality. I enjoy that; it's something I like to see.



Torre uses a sandpaper block to create bold line widths for his Pentel Sign pens. New pens are used to create fine lines. As points wear, he sands them to create thicker line widths.

**J.R.:** What would you say is the value of drawing to landscape architects—today and in the future?

**TORRE:** Delineation of concept. There's a very human quality there. When you look back at great renderings from da Vinci on, you're looking into that guy's brain. You can see how he made those strokes, how he crossed something out or corrected and modified it. Back in the kitchen we have a drawing that's a cross section of Brunelleschi's Duomo in Florence. That's a contract document. He's got little notes on it, making calculations and then scratching out. That's the drawing that built the biggest dome that mankind had ever seen. And that was his drawing, in his own hand.

I think anybody can be taught to draw with a level of proficiency. But if you're at the proficient level only and you hate doing it, you're not going to embrace it like you really enjoyed it or really believed in its power as a tool. And if you don't feel comfortable with drawing it, how can you figure it out?

Romantically I want hand drawing to stay. Pragmatically I don't know how it can be replaced. I find it hard to imagine. But I believe that in the future there will be more people who want to draw, because it's more valuable than it's ever been before.

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