

essay

Firmly Planted

Ensuring Human Scale to Super-tall and High-impact Structures

By John Wong

Buildings can be inspiring and memorable, especially those that are strikingly different, incorporate unusual elements, or surpass the 100-story mark of super-tall high-rises. They build an image that can brand a corporation or raise a city's stature. Their success also ultimately depends on how they serve their occupants and visitors.

Large-scale, city-defining structures serve critically important purposes and there is too much at stake to risk them not becoming the well-used facilities they are intended to be. Yet, without fully anticipating their on-the-ground integration with the community, large structures can end up creating ghost-town plazas, ignored entries, empty sidewalk cafes and retailers, and dark and unwelcome street-canyons.

How can cities, designers, developers, and project sponsors ensure land-level success? How can new projects be as globally-celebrated and locally used as the Hangzhou Hubin historic urban lake-



front in China, the San Francisco Academy of Sciences museum, Victory Plaza in Dallas, or Los Angeles' new Avenue of the Stars urban plaza? In our work creating site-planning and landscape architecture around the world, SWA Group has identified a number of ground-level strategies that make high-impact structures even more successful:

People-Oriented Plazas Attract People

Street-level spaces too often are left to standard plaza design, where a few



Renzo Piano's California Academy of Sciences in San Francisco (opposite) and Shanghai Tower by Gensler (above, rendering courtesy of Gensler).

benches and a solitary sapling are plopped amid sprawling concrete. Plazas should be designed for a variety of activities from retail to people-watching, connections to nature, even lunch-time concerts. Sites should be planned around the shifting angle of the sun to have as much sun as possible in winter, yet be shaded during hot summer months. Incorporating water further enriches the urban environment. Fountains, pools, and other water features can transform a relatively sedate space into an attractive destination.

The sound of the water can also mitigate street noise and cool a hot urban setting. The Burj Al Oula in Saudi Arabia, a mixed-use residential office tower with retail shops, is connected by multiple levels of garden with greenery and intricate water features as a connective device.

Top Draw: Tree-Powered Plazas

Spaces that include trees have proven to be the most utilized. Rows of trees provide interesting design elements and help humanize the streetscape.

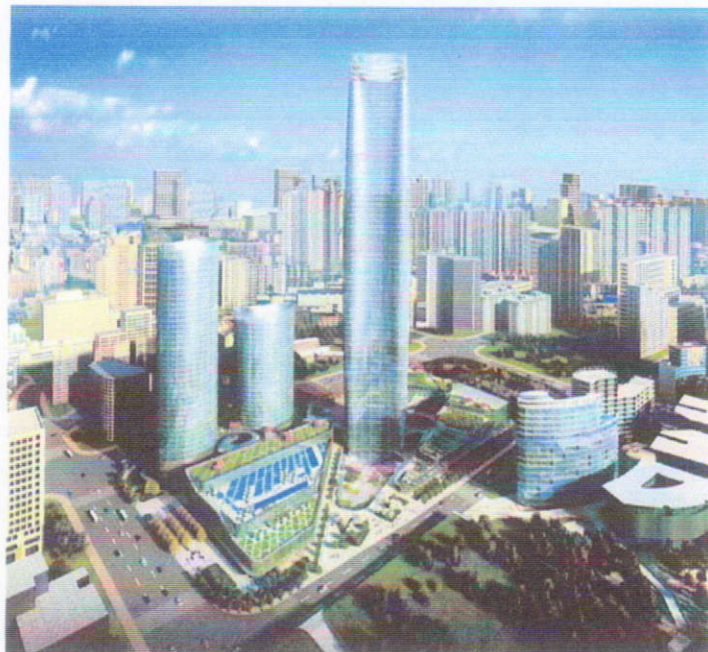
Trees also structure a building's open space environment, define pedestrian areas. Deciduous trees provide shade in the summer, open exposure for sunlight in the winter, and beautiful blooms and enticing fragrances in the spring.

Let Set-backs Set Back

Set-backs can create superior amenities that truly enhance the buildings they serve. Wide sidewalks can provide space for trees and adequate area for human interactions like an outdoor café and a plaza. Set-backs also bring greater sunlight and minimal shadow to an outdoor space. The Emaar Boulevard at the Burj Dubai, which is nearing completion as the world's tallest tower, defines the public realm of a pedestrian-oriented promenade with a double row of palms, custom-designed furnishings, café amenities, and a diverse program of urban art.

The Art of Building-siting

Skyscrapers are notorious for the "canyon effect" of creating wind tunnels and forboding streetscapes on the ground, so their rising shape should be planned to enhance the neighborhood and respond to sunlight, shade, and wind. Rather than turning a highrise's back to its neighbors, unattractive parking garage entrances and loading docks are best placed on the back-sides so that all-important street edges can provide welcoming spaces. For example, the Shanghai Tower in the city's Pudong high-rise district made



provisions for street-front retail and entries to a hotel and public functions, moving utilitarian functions to the side of the building.

Strong Connections for Better Buildings

Buildings should not be isolated islands. A structure becomes part of the urban fabric if it ties to nearby blocks and neighborhoods, and to natural amenities whether parks or distant mountains. At Nanjing Greenland Financial Center in Nanjing, China, the towers relate to the grand North Zhongshang Boulevard with a pedestrian plaza facing the streetfront and the historic Drum Tower monument, and maximized interior views of the lake and mountains beyond. Connections are equally important with public transit. At the North Bund White Magnolia Plaza project in Shanghai, a below-grade level will lead directly to a planned subway and existing city-wide transit.



North Bund White Magnolia Plaza project in Shanghai by SOM (opposite) and Hangzhou Hubin historic urban lakefront in China (left).

Ground Floors Give Life

Buildings should make the most of their “front door” and public access on the ground floors. First, the ground floor must activate the street. That means no blank walls, no gaping parking garages entrance, no noisy loading docks. Second, maximize frontage with pedestrian activities—entries, cafes, and visually interesting storefronts, and less—if any—street-deadening bank branches.

Sumptuousness of Scale

For large and imposing structures, a hierarchy of scaled spaces can echo the scale of spaces in the surrounding district. This can be achieved with a variety of large and small spaces, open and closed spaces, formal and informal spaces, hard and soft spaces, and different shapes to create interesting passage for users and passersby.

Michigan Avenue—Chicago’s “Magnificent Mile”—integrates these strategies to provide a human-scaled, connected district for workers, shoppers, residents, and visitors. The street itself is a stunning view corridor. Tall buildings of varying heights frame the streetfront, which is lined with trees that not only provide a shaded green promenade, but also unify the long line of towers. Distinctive storefronts and entries, mixed with outdoor cafes and outdoor plazas and courtyards, create visual interest and social connections along North Michigan Avenue.

Increasing the Building's Impact

Buildings are more than homes, offices, worship spaces, shopping or entertainment complexes—They should also maximize their potential as truly active and vibrant sources of city life. By careful planning of their connection and integration to the urban fabric, high-impact structures can fully realize their goal of becoming icons of the city and honored landmarks of global recognition. ☺

John Wong, FASLA and FAAR, is a principal in the Sausalito, Calif., office of SWA Group, an international landscape architecture, planning, and urban design firm. www.swagroup.com