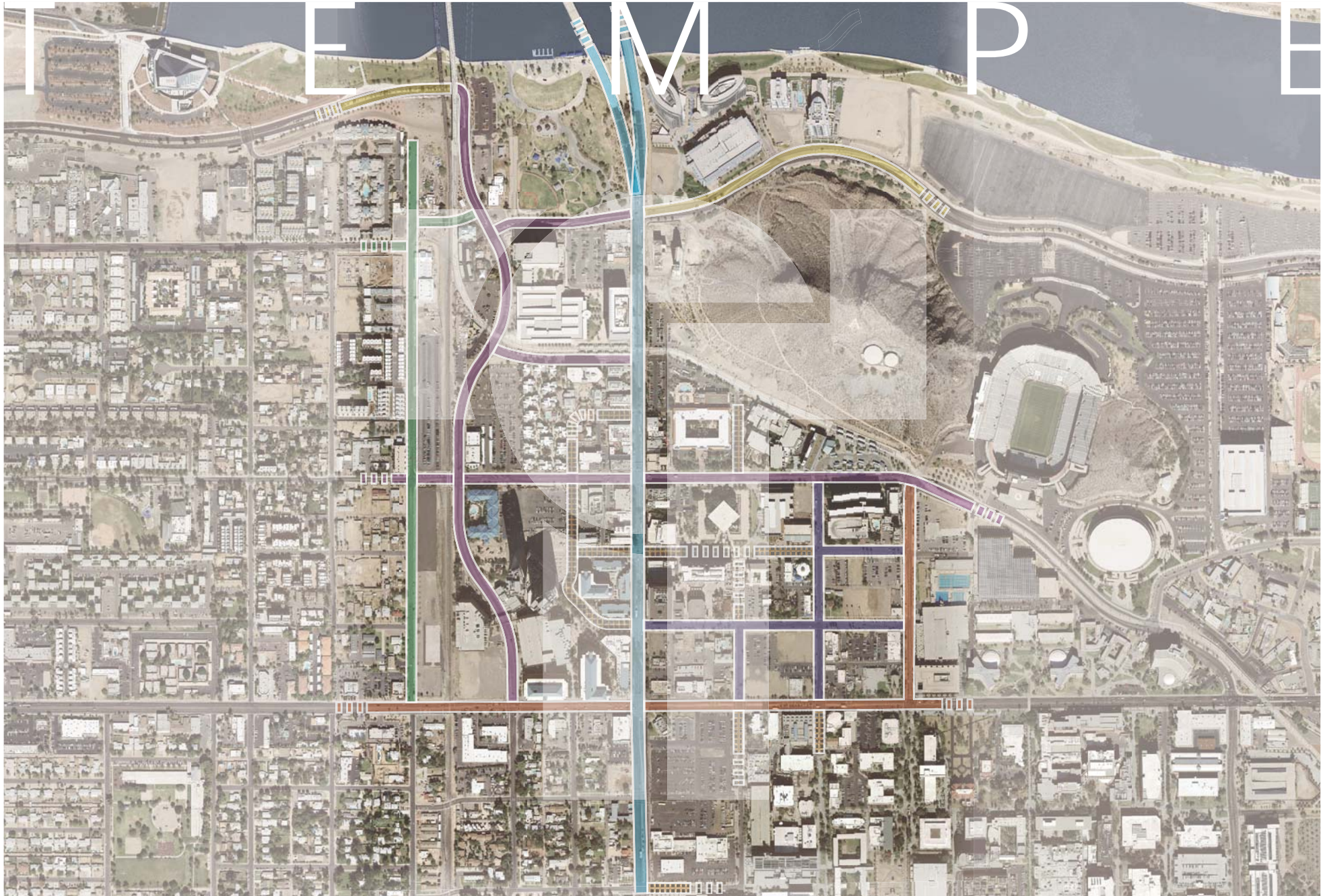


T E M P E



MILL + LAKE DISTRICT

STREETSCAPE PRINCIPLES + GUIDELINES

ACKNOWLEDGEMENTS

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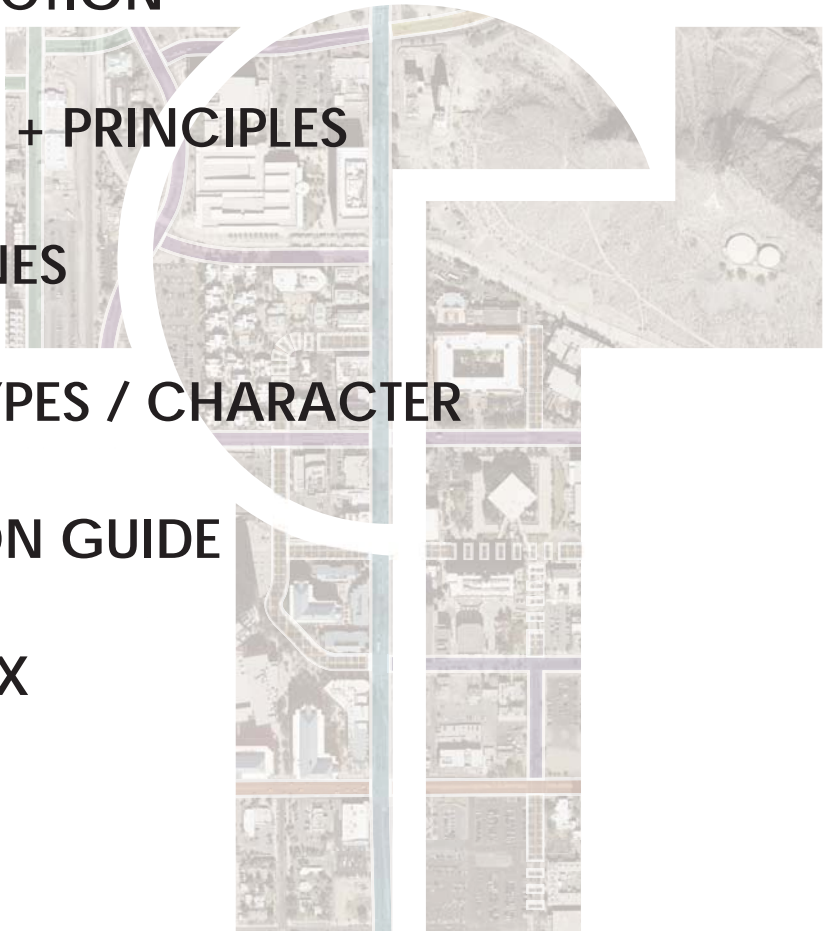
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February 2011



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I N T R O D U C T I O N

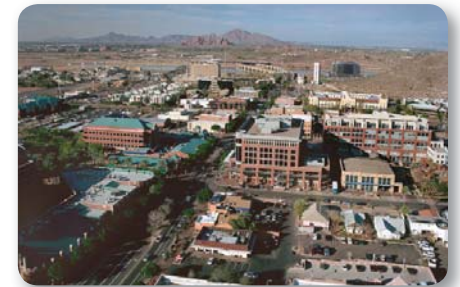


The founding and development of Tempe and its downtown area, the *Mill + Lake District*, is woven into the fabric of Arizona history. Beginning with the pre-historic Hohokam culture and their descendents, followed by Mexican American settlers, Tempe coalesced as a community with the arrival of Charles Trumbell Hayden and his subsequent commercial and community-building efforts. The original townsite roughly corresponds with what is now considered "downtown." Since its founding in 1885, growth and development of the Territorial Normal School (Arizona State University) into a major institution of research and academics has been inextricably linked with that of the community, especially the downtown.

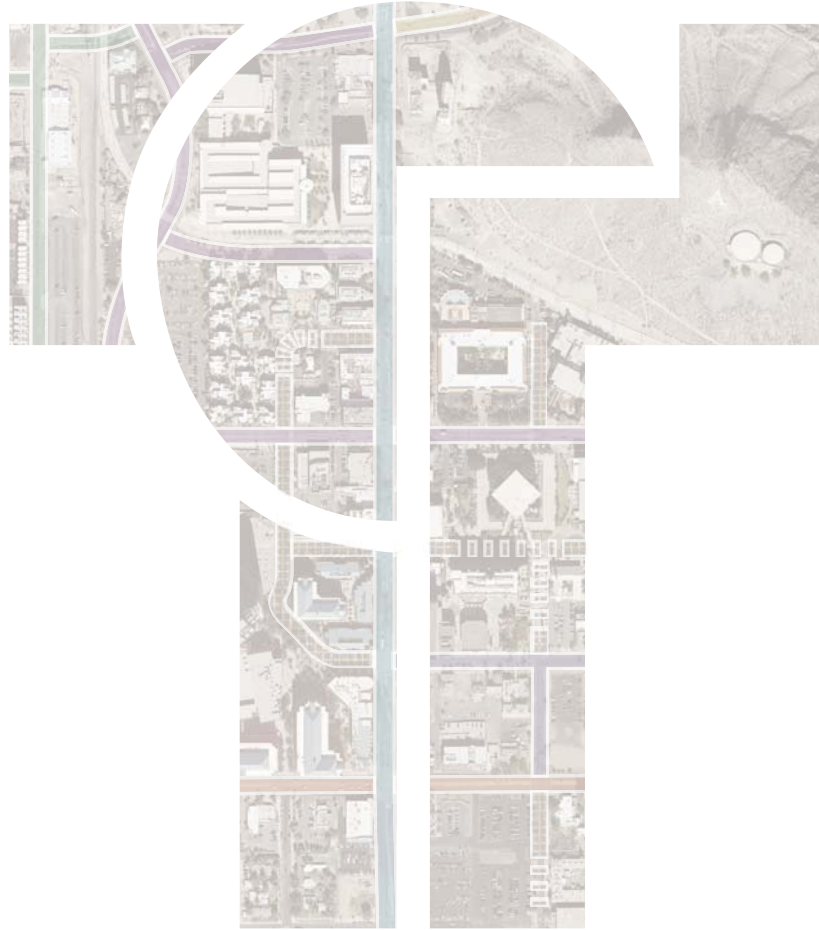
Growth in the region was steady, but slow, throughout the early part of the century. While architectural styles gradually came and went, growth rates increased exponentially after World War II. With growth, however, came detrimental consequences for downtown Tempe. As the community expanded outward, primarily to the south, the central business district declined, giving the impression that the downtown was a place to get through, not a destination.



Completion of the strikingly modern Municipal Building in 1970 symbolized a commitment by the City Council to the revitalization of downtown Tempe and a desire to be seen as a progressive community. This commitment was bolstered in 1973 with the creation of the University-Hayden Butte Redevelopment Area and participation in the U.S. Department of Housing & Urban Development's Community Development Block Grant Program. Revitalization was not without its controversy, however. Many community leaders touted the wholesale demolition and replacement tactics of "urban renewal" employed by many cities in the 1950's and 60's. Others favored a hands-off approach. Ultimately, the "Par 3" strategy, proposed by a team of local architects calling for the preservation of significant historic structures combined with compatible new construction, was adopted, along with the "Old Town" theme. With the subsequent rehabilitation of key historic buildings, development of mixed-use centers incorporating retail, commercial and residential uses, and coordinated management and promotion, the downtown again became a destination for shopping, dining, living, working, socializing, recreating and enjoying arts and events. This rebirth and regeneration restored downtown to its rightful role as the heart of the community and garnered numerous awards and widespread recognition for the community.



Completely surrounded by other municipalities and jurisdictions, however, Tempe, unlike most other valley communities, must continue to focus its efforts on reinvention and revitalization, especially *throughout* the *Mill + Lake District*, in order to maintain its economic base and enhance the quality of life for its residents. It must also guard against complacency, accept the challenge of competition and continue to evolve if these goals are to be realized. It is in that spirit that these principles and guidelines for streetscape design and development are presented.



P U R P O S E + P R I N C I P L E S



The role of the street is social as well as utilitarian. Andres Duany

As Tempe experiences inevitable cycles of growth and economic development, the community and its core, *the Mill + Lake District*, continue to evolve. While uses and, eventually, buildings come and go, the streets serve as a constant, a connecting fabric. A *streetscape* consists of the public right-of-way within which a street is located, typically from building face to building face in a downtown area, and may include: landscape (trees, planters, etc.), hardscape (sidewalks, paving, etc.), furnishings (trash receptacles, benches, etc.), lighting and signage, as well as on-street parking, vehicular and bicycle travel lanes and pedestrian crossings.



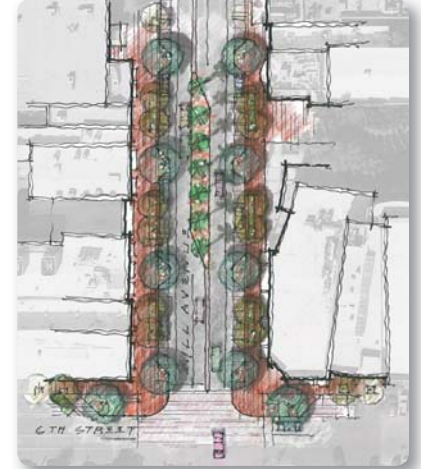
Applicable components of General Plan 2030, the Zoning and Development Code / Transportation Overlay District, the *Mill + Lake District Placemaking Guidelines* (PPS), *Community Design Principles: Downtown / Mill Avenue District*, Hayden Ferry Lakeside, Rio Salado and Multi-Use Path design guidelines, as well as interface with the Arizona State University Tempe Campus CDP Design Guidelines, combined with public input and staff/team research provide the following principles for streetscape design and development.

Purpose

Develop standards to guide future redevelopment and ongoing maintenance within the public rights-of-way in the Downtown Tempe / Mill + Lake District.

Principles

- ▼ Achieve a level of detail and intensity of experience that promote human interaction and economic vitality. Enhance the street infrastructure as an interesting and catalytic network of public spaces connecting the downtown core.
- ▼ Balance the prehistoric and historic tradition of an irrigated "oasis" with contemporary needs for water conservation, drought tolerance and mitigation of heat island effect.
- ▼ Prevent slum and blight, encourage reinvestment, stimulate private investment and attract new development, which would include attention to street-front appearance (attractive, accessible and human-scaled) and function of public space, in turn maximizing the potential of existing attractions while creating new destinations and features appealing to all ages.
- ▼ Respond to competition from other communities and private suburban developments by emphasizing *authenticity*, celebrating the fact that the Mill + Lake District is a real live-work-learn-play downtown with history and character.
- ▼ Enhance the community's quality of life for future generations by creating a memorable, *sustainable* (socially and economically, as well as environmentally) sense of place with an aesthetically pleasing theme, safe, human-scaled pedestrian environments, adequate lighting, shade, pathways and efficient circulation, accessible to all.
- ▼ Recognizing that communities are by, for and about people, their activities, impressions and interests, strive for a *diverse continuity* within the district's built environment. Eclecticism and evolution are preferable to uniformity and rigidity. Enabling an ongoing variety of forms, details, materials will contribute to a long and vibrant community lifespan.



Objectives

Promote a safe environment by incorporating Crime Prevention Through Environmental Design (CPTED) principles and traffic calming strategies.

Promote a walkable environment with street-level activity in which automobiles participate, but not dominate, essential to an attractive, vital community. Emphasize efficient use of the street space by encouraging slow automobile speeds, multi-modal transportation and shared use of streets utilizing "complete" or "green" street strategies, rather than extensive street widening.

Maintain a comfortable year-round outdoor environment while reducing energy consumption and managing stormwater retention and discharge.

Enhance and promote Tempe as a diverse, stimulating cultural- and arts-oriented community where public amenities inspire and enrich people's lives and experiences. Provide things that surprise and delight, becoming conversation pieces, including elements such as experiential and functional public art, special seating, tables, games and play areas with shade and seating.



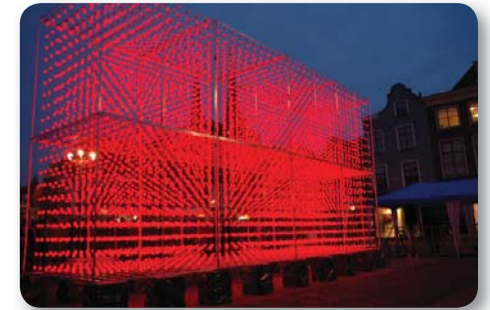
Utilize advanced technology in lighting, energy conservation, visual art and communications.

Reinforce a strong identity and threshold recognition (celebrate edges) by achieving consistency in high quality plant and hardscape materials along streets, incorporating selected site furnishings, lighting and banners to create formal allees with desert-adapted trees and plantings. Provide color and visual interest.

Develop a coherent visual landscape with large and small scale elements within a meaningful theme; establish continuity and rhythm via streetlights, banners and other repetitive elements.

Encourage higher levels of productivity and connectivity by coordinating hardscape, landscape and pedestrian routes between the existing and proposed developments with special attention given to the integration of public spaces.

Enhance wayfinding via signage, landscape and hardscape materials, furnishings and other means.



Allow for and encourage architectural continuum: visible evidence of architectural evolution (“if variety is the spice of life, the Mill Avenue District is a savory stew of eclectic ingredients, fortified by a unified streetscape and an attention to human interest and detail”). Therefore, appropriate variations in character and scale are expected and encouraged, while maintaining overarching principles. Creatively combine new and traditional materials and forms.



Respect the street grid: streets, walks and paths, typically based on the layout of the original townsite, make connections between spaces and places within and surrounding the district. These connections should be enhanced, rather than hindered, by development.



Use plant materials to reduce building scale and mass, provide shade, define space and help integrate the structures into the surrounding environment.



Consider gateway statements and focal points where appropriate, while establishing edges and contributing character to the downtown experience.



Implementation

Although an all-at-once comprehensive implementation of these principles and guidelines would result in a dramatic transformation of the Mill + Lake District's physical realm, financial realities dictate a graduated approach. Recognizing, however, that even small steps, when taken in concert with an overarching concept, can soon have a positive effect, *the following actions are suggested for immediate implementation by policy*, as opportunity and need arise (within current budgets):

- ▼ As trees and other landscape materials succumb to disease or reach the end of their effective lifespans and must be replaced, replace with varieties as specified in these guidelines.
- ▼ Replace street lights, furnishings and other amenities as necessary due to wear or malfunction with products as specified in these guidelines.
- ▼ Require that dining patios, building façade modifications and signage proposed by private sector concerns conform to these guidelines.
- ▼ Utilize public art funds and other grant opportunities or public-private partnerships for additional enhancements such as "high-tech" wayfinding signage and artist-designed bike racks, shelters, etc.
- ▼ Consider limited "off-site" advertising to pay for applicable improvements such as wayfinding signage (which could also serve as public announcement venues) and newsracks.

Further implementation via:

- ▼ Required improvements by proposed private developments.
- ▼ Leverage federal resources (such as community development and transportation funds), future CIP projects or improvement districts to implement larger streetscape components, such as curb reconstructions, new sidewalks, permeable paving, electronic wayfinding system or large-scale tree or lighting replacements.



G U I D E L I N E S

Building Facades

- ▼ Emphasize ground floor building facades with awnings and overhangs which serve to “embrace” pedestrians, transparent windows with articulated entries to achieve “permeability” and interesting architectural details that catch the eye, project a comfortable human scale and engage the passer-by.



- ▼ Promote variety and sculptural qualities in buildings, as well as undulation in building planes.

Furnishings/Accessories/Miscellaneous

Establish a coordinated palette to minimize visual clutter while avoiding sterility.

Benches

- ▼ Provide shaded seating with well-spaced benches; locate street furniture at key nodes where pedestrians are intended to gather.
- ▼ At locations conducive to multiple benches, position benches facing each other, perpendicular to the line of travel, wherever possible.
- ▼ Products/locations per Selection Guide/Matrix.



Receptacles

- ▼ Utilize a coordinated system of waste, ash and recycling receptacles; allow potential for logo attachment.
- ▼ Products/locations per Selection Guide/Matrix.

Newsracks

- ▼ Consolidate newspaper distribution into a coordinated newsrack system, satisfying free speech rights while eliminating disheveled groupings of mismatched boxes. Locate for visibility and convenient access at or near intersections, bulb-outs and other pedestrian gathering areas, while avoiding pedestrian conflicts.
- ▼ Product(s) per Selection Guide.



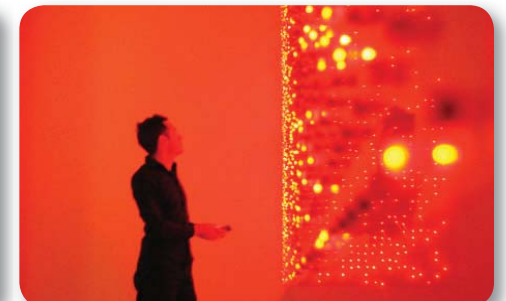
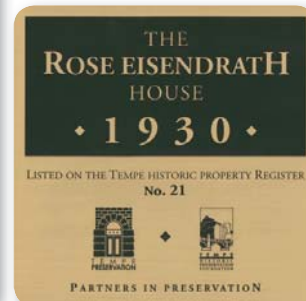
Utility Structures

- ▼ Utilize landscaping, art elements and other means to screen or otherwise minimize the impact of utility service structures. Relegate to private property wherever possible. At a minimum, paint structure to match primary building material of adjacent building.



Signage

- ▼ Utilize a coordinated system of plaques or other devices to identify icons, such as community heroes, historic buildings and sites.
- ▼ Encourage distinctive flag-mount signs on building facades specifically designed for the associated business or building.
- ▼ Utilize technology such as LED in addition to creative combinations of shapes and materials to create a distinctive ensemble of freestanding directory/informational sculptural signage "kiosks" located in sidewalks at or near intersections, "bulb-outs" and other pedestrian gathering areas. Explore "functional/informational" art opportunities.





Shelters

- Transit and other shelters should be designed to complement their immediate surroundings, utilizing a palette of materials drawn from the streetscape and adjacent building(s), with artist-designed installations at selected, feature locations.



Landscape

Plant selection shall consist primarily of indigenous or arid-adapted deciduous and evergreen varieties, appropriate to their location in form and surface characteristics, with consideration of the growing conditions within an urban hardscape environment relative to sun exposure, protection of visual corridors and close proximity to pedestrian circulation.



Trees

- Maintain a higher, less dense canopy on street trees.
- Wherever possible, frame historic building facades and significant building entries with landscaping, rather than placing a tree directly in front of such an element.
- Position trees for maximum shade of pedestrian routes and other hard surface areas for increased comfort and reduced heat island effect.
- In areas of conflict with underground utilities, trees may, when necessary to maintain rhythm and continuity. Be placed in raised planters (materials and construction similar to "Raised Planters," as described herein.



- Require owners of vacant parcels to place and maintain boxed trees on-site adjacent to the street frontages, utilizing species per the Selection Guide/Matrix.
- Integrate tree spacing with street lights to minimize conflicts. Typical: street lights at 60' on center with two street trees between, dependent on specific locational factors and lighting requirements.
- Species/locations per Selection Guide/Matrix; installation of largest practical sizes (typically 48" box) per Tempe Standard Landscaping/Irrigation Details.

Grates

- ▼ Products/locations per Selection Guide/Matrix; installation per Tempe Standard Details where applicable (with the addition of screw-to-frame mounting where applicable to prevent upward migration of the grate surface over time). Utilize recycled metal products with minimal surface preparation whenever possible.



Planters/Planting Areas

- ▼ Incorporate mass plantings of desert shrubs in the largest practical sizes for vibrant color and bold form, without posing a hazard to motorists or pedestrians.
- ▼ Linear planting areas shall not typically interrupt building-curb continuity. When necessary to accommodate grade changes, utilize combinations of steps, ramps and planters.
- ▼ Space permitting, raised planters, constructed of cor-ten or stainless steel (see Selection Guide/Matrix) in linear geometric or curvilinear shapes (as best complements adjacent architecture) with thin upper edges may be employed. Other plantings as possible within medians and other available areas.
- ▼ Species per Selection Guide; installation per Tempe Standard Landscaping/Irrigation Details.



Lighting

Contribute to the overall ambiance and safety of the streetscape while meeting Dark Sky and energy efficiency requirements.

- ▼ Utilize light fixtures to reinforce street character, establish rhythm, define edges and provide opportunities for banners (min. 2' x 10' each).
- ▼ Products/locations per Selection Guide/Matrix.



Public Art

Seek opportunities to engage and delight the passer-by. Utilize technology; employ whimsy; incorporate architecture; serve a purpose...or not.



Sidewalks

In addition to pedestrian circulation routes, sidewalks within the district collectively constitute the “living room” of the community, providing space for social interaction, access to commercial, retail, residential and entertainment establishments and venues for multiple activities.

- Surfaces and travel routes shall meet ADA standards and, in addition, allow for a 6’ direct, unobstructed pedestrian path within an 8’ clear passage space throughout; avoid creation of bottlenecks. Provide a minimum 3’ smooth, level path through or around any heavily textured surface areas and/or driveway slopes.



- Encourage interactive encroachments such as sidewalk dining and display. Define dining areas by the least restrictive means allowed by applicable statutes. When railings are required by law, they shall be designed to complement their associated architecture. Furnishings within the defined dining area shall be compatible with the character of the railing and/or building architecture, as well as removable for interior storage after business hours wherever possible.
- Sidewalks shall be designed as a continuous hardscape from building frontage to street/curb line, accommodating streetscape elements such as: street trees, landscaping, lights, street furniture, kiosks, etc., while ensuring accessibility. Where level changes are necessary, due to grade differential, integrate steps and/or ramps with planters or other architectural elements to maintain continuity of the hardscape.



- Employ curb/sidewalk “bulb-outs” to define on-street parking areas, reduce pedestrian crossing distance at intersections and provide additional space for landscape and sidewalk amenities, including seating, newsracks and wayfinding signage.
- Curb radii at street corners / intersections shall typically be the minimum allowed by applicable standards. Provide dual ADA access ramps aligned with paths of travel (in lieu of a single, 45° orientation) at intersections wherever possible, per Tempe Standard Detail T-328.



- Utilize a variety of paving materials, ranging from all brick on the Signature Street (Mill Avenue) to compatible combinations of materials, including brick of varying proportions elsewhere. Relate details to adjacent architecture. See Selection Guide/Matrix for acceptable materials and approximate percentages.



- Preserve-in-place 4' x 4' sections of concrete sidewalk in which a WPA stamp is found.
- Materials/locations per Selection Guide/Matrix.



Streets / On-Street Parking

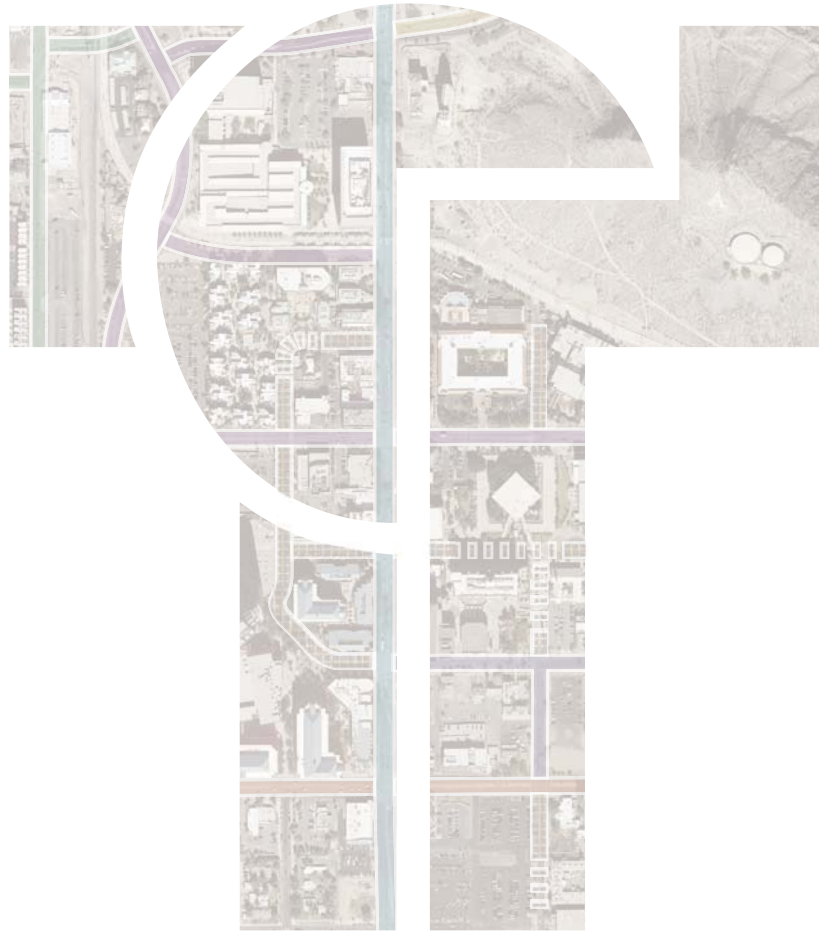
Streets within the district must function as more than mere conveyors of vehicular traffic, contributing to economic vitality and social interaction, while minimizing environmental and safety concerns. As far as possible, maintain the original street grid. Where interruptions are necessary, provide walks, street trees, lighting, banners, furnishings, etc. in a contiguous manner to visually extend the grid and maintain pedestrian circulation routes.

- Pedestrian crossings should consist of highly-contrasting color, within boundary markings as required by law, to provide high visibility for motorists and a smooth surface for pedestrian crossing, as well as visual accents; accentuate key intersections with applied color and patterns (patterns to reflect historic themes, such as Hohokam or Sonoran designs, early street grids, etc.). Utilize "cool coating" material for reduction in heat island effect.
- Maximize on-street parking as a streetscape element which slows traffic, provides a buffer for pedestrians and encourages retail activity. Delineate parking areas with permeable concrete pavers and/or colored "cool coating" material for reduction in stormwater run-off heat island effect and additional visual accent. Wherever possible, orient angled parking for 60° back-in movements to calm vehicular traffic, increase visibility of bicyclists and contribute to a distinctive downtown "vibe." Provide parallel spaces with additional street tree opportunities.



- ▼ Incorporate flush curbs with textured and/or colored (“cool coating”) paving material at *auto courts* (see Street Types reference map for locations); employ bollards where necessary to prevent or direct vehicular traffic (products/locations per Selection Guide); utilize 90° head-in parking spaces.
- ▼ Where applicable, locate any transit facilities (rails, overhead power lines, etc.) so as to minimize landscape and bicycle conflicts, maximize pedestrian interface and amenities and achieve a balanced visual appearance while contributing to the overall shared-use concept of the associated street space.





S T R E E T T Y P E S / C H A R A C T E R



STREET TYPES / CHARACTER

The public right-of-way network within the downtown / Mill + Lake District is comprised of streets with differing characteristics and functions. For purposes of these streetscape guidelines, they have been distinguished as follows:

Signature Street: Mill Avenue (Town Lake north to Tenth Street south)

Mill has been described as the “heart” of the community and has long been Tempe’s “main” or “signature” street, linking Tempe Town Lake, Tempe Beach Park and the historic Hayden House (La Casa Vieja) and Flour Mill, as well as Phoenix and Papago Park, on the north with Arizona State University and residential areas to the south. In between can be found some of the most significant historic structures and important redevelopment projects in the community and state.



As part of the ongoing redevelopment of downtown Tempe, Mill Avenue’s streetscape received its first modest makeover when, in the early 1980’s, portions of the concrete sidewalks were converted to brick, faux gas lamp street lights and some street trees (primarily bottle trees, chosen due to their columnar shape requiring less space on the relatively narrow sidewalks) were added in a desire to convey an “old town” feel. With the ensuing completion of the US 60 freeway, Mill Avenue was decommissioned as a federal and state highway, allowing for the travel lanes to be narrowed and building overhangs to be restored. In 1987 a major streetscape renovation of Tempe’s “Main Street” was undertaken, resulting in wider, all-brick sidewalks, concrete paver intersections, upgraded street lights, benches, trash receptacles, planters and new street trees (the controversial Indian Laurel Fig (*ficus nitida*), all of which were selected to reinforce the image of downtown Tempe as “Old Town,” while providing an unparalleled level of pedestrian comfort. The Mill Avenue streetscape subsequently received numerous awards, culminating with its selection as one of America’s Great Streets in 2008 by the American Planning Association.

It is not the intent of these guidelines to substantially alter, but rather to enhance the character of this linear community icon, while allowing for necessary evolution and further redevelopment.

Riparian Transition: *Rio Salado Parkway (west of Ash and east of Mill)*

This unique street serves as both a bypass around and link to the district from Sky Harbor International Airport, the Red Mountain Freeway, commercial/industrial development and Tempe Center for the Arts to the west and Hayden Ferry Lakeside, Sun Devil Stadium, Karsten Golf course, Tempe Marketplace and the 101/202 freeway exchange to the east, all the while paralleling Tempe Town Lake and the Rio Salado Project to the north.

Such a setting calls for a response appropriate to the desert-meets-water character of this riparian/revitalization/reclamation area.



External Connector/Transit: *Ash Avenue, Rio Salado Parkway (Ash to Mill), Third and Fifth Streets*

This group of streets serves to connect the internal core of the district with adjoining neighborhoods or other connectors, including current or planned transit routes. They convey much of the character of Mill Avenue into the rest of the district and beyond.



Internal Connector: *Myrtle and Forest Avenues, Sixth and Seventh Streets*

Traditionally more residential in character, this group represents the most tangible remnant of the original townsite's street grid, while providing pedestrian-scale circulation routes within the southeast quadrant of the district. The inherent challenge in this instance is to respect traditional character while anticipating future redevelopment.



Town + Gown / Campus Transition: *University Drive(Farmer to College) and College Avenue*

These two streets represent very different functions, yet distinctly similar characteristics. University Drive is a major arterial through the community, carrying a high volume of vehicular traffic and simultaneously linking and separating the district from the largest single-campus university setting in the nation, complete with its own Comprehensive Master Plan. College Avenue, however, is a mid-section collector segment with significant transit (bus) traffic and pedestrian utilization. Despite its relatively short length (3 blocks), College has a special role in connecting the Tempe Transportation Center / Light Rail and Tempe (Hayden) Butte to the north with the campus' main pedestrian thoroughfare, Cady Mall, to the south. ASU's installation of administrative and academic spaces within the district and plans for future "town & gown" redevelopment, contribute to the activity and distinctive "vibe" of these areas.



Live/Work Transition: *Farmer Avenue*

Previously considered beyond the downtown redevelopment area, Farmer Avenue is now seen as a key transition from the more intensely commercial mixed-use development to the east and less intense, live-work character to the west. Although the Union Pacific Railroad forms a partial barrier, the proposed Farmer Arts District redevelopment will act as a buffer-scale extension of the district.

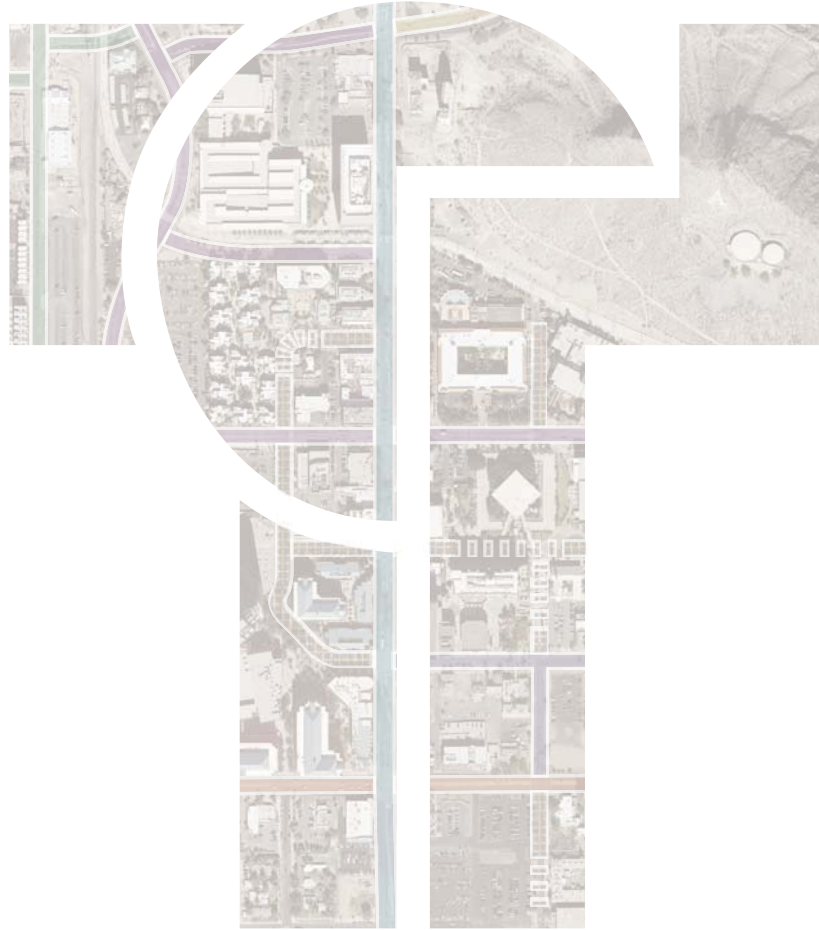


Auto Court: *Portions of Fourth, (west of Mill), Sixth (west and east of Mill, west of Forest) and Seventh (west of Mill) Streets and Maple (south of fourth, north of Seventh) and Myrtle (north of Seventh, north of Fifth) Avenues*

These often discontinuous segments of streets typically terminate in public spaces or private development areas. Even when interrupted by non-vehicular zones, they serve to visually and, for pedestrians, physically continue the street grid. Such spaces provide unique opportunities for special treatments, such as flush curbs with bollards, continuous hardscape throughout the pedestrian and vehicular realms and 90° head-in parking, space permitting, forming multi-use plazas, easily convertible from functioning streets to special events venues.



See map for reference and Selection Guide/Matrix for materials and other elements specific to each street type.



S E L E C T I O N G U I D E

Benches

All benches to have surface mounting capability and include backs, end and center arms.



BE-1



BE-2



BE-3

BE-1 Victor Stanley 'Classic Series' CR-196, 72"; dark bronze powdercoat finish

BE-2 Victor Stanley 'Framers' Modern Series' FMBF-324, 96"; 'Titanium' powdercoat finish

BE-3 Landscape forms 'Austin' 72"; 'Silver' powdercoat finish

Bike Racks

BR-1 Mill Avenue bike post, dark bronze powdercoat finish.

BR-2A Simple inverted individual 'U' loops (variety of manufacturers) with surface-mount flanges on each leg; mount atop finished concrete walk or atop concrete underlayment where concrete or brick paving units occur; galvanized metal or silver powdercoat finish.

BR-2B Same as 2A, but with dark bronze powdercoat finish.



BR-1



BR-2A

Bollards

- BL-1 Mill Avenue "historic", dark bronze powdercoat finish.
- BL-2 6th Street Park - paint to match existing.
- BL-3 Landscape Forms 'Annapolis' 6" dia., 'Titanium' powdercoat finish (solar powered "Smart Bollard" @ feature locations).



BL-1



BL-2



BL-3

Grates



GR-1A



GR-2A



GR-3A



GR-3B



GR-3A+3B

GR-1A Ironsmith 'Starburst' 48" x 144" recycled cast iron, unfinished; position parallel to curb.

GR-1B Same as 1A but with black powdercoat finish.

GR-2A Ironsmith 'Starburst' 60" SQ recycled unfinished cast iron.

GR-2B Same as 2A but with black powdercoat finish.

GR-3A Ironsmith 'Paver-Grate' 60" x 96" or 72" x 72" galvanized steel with recycled unfinished cast iron 'Concentric' trim ring.

GR-3B Same as 3A but with cast aluminum 'Market Street' trim ring.

Newsracks

'Cityrack' – appropriate sizes, finishes and locations (typically near intersections and other pedestrian congregating areas, space permitting, as manufactured by City Solutions).



Planters



PL-1A

PL-1A Fabricated stainless steel with impervious lining and allowances for irrigation and drainage; combine with concrete elements as necessary.



PL-1A



PL-1B

PL-1B Same as 1A but with cor-ten steel.

Plants/Plantings



Consider associated street type/character and utilize appropriate blend of bold, colorful, arid-adapted, low-level accent plant materials from the Arizona Department of Water Resources Low Water Use / Drought-Tolerant List (Phoenix Metro Area) in planters and other planting areas*, such as:

- ▼ Agaves and aloes
- ▼ *Acalypha monostachya* (Raspberry Fuzzies)
- ▼ *Baileya multiradiata* (Desert Marigold)
- ▼ *Chysactinia mexicana* (Damianita)
- ▼ *Convolvulus cneorum* (Bush Morning Glory)
- ▼ *Eremophila maculata* (Valentine Bush)
- ▼ *Oenothera berlandieri* (Mexican Evening Primrose)
- ▼ *Zauschneria californica* (Hummingbird Trumpet)
- ▼ *Muhlenbergia rigida* (Purple Muhly)
- ▼ *Penstemon parryi* (Parry's Penstemon)
- ▼ *Ruellia brittoniana* (Dwarf 'Katie's' Ruellia)
- ▼ *Salvia greggii* (Autumn Sage)

* Apply ¼" minus decomposed granite 'coral' to exposed ground surface areas.

Sidewalk Paving

Acceptable materials* include:

- ▼ Brick: Tempe Antigua Blend (as made by Phoenix Brick Yard; install per Tempe Std. Details)
- ▼ Concrete Pavers: light texture or ground face; natural or subtle integral color.
- ▼ Stone Pavers: durable material of sandstone or slate appearance with minimal surface variation and subtle color differentiation amongst the units and from the adjacent material.
- ▼ Concrete: natural or subtle integral color with "smooth" (light broom), ground or light sandblast finish.



* See Matrix for percentage of brick

Street Lights



SL-1



SL-2



SL-3

SL-1 Moldcast per Tempe Standard detail T-653 with Tempe Bronze finish

SL-2 Architectural Area Lighting 'Universe Collection' per Tempe Standard Detail T-645; Black finish

SL-3 Kim per Tempe Standard Detail T-658; brushed aluminum finish

SL-4 Supplemental - *only as necessary*, per Tempe Standard Detail T-651, with angled mast arm and dark bronze finish

Street Paving Accents

In addition to such markings as required to ensure pedestrian and vehicular safety and circulation, incorporate accent colors and patterns into crosswalks, on-street parking and selected intersections.

- ▼ "Cool coating" material (integrally-colored, spray or roller applied, ultra high performance concrete) by Emerald Cities, USA*. Colors to be compatible with sidewalk materials while providing adequate differentiation on asphalt surfaces.
- ▼ On-street parking to be delineated by cool coating material or ADA-compliant permeable concrete pavers within similar color ranges.



Trees

Tree species are identified in the Selection Matrix as *primary* (the main, regularly repetitive tree within the sidewalk area of a street), *secondary* (supplemental to the primary tree when space permits, such as a second row or in a landscape island, bulb-out or median) or *tertiary* (used for special accents or effect).



ST-1



ST-2



ST-3



ST-4



ST-5



ST-6



ST-7



ST-8

<i>reference</i>	<i>species (common name)</i>	<i>botanical name</i>	<i>remarks</i>
ST-1	Indian Laurel Fig	ficus microcarpa nitida	replacement or transplant
ST-2	Chinese Pistache*	pistacia chinensis	
ST-3	Thornless Mesquite*	prosopis x 'Phoenix'	
ST-4	Desert Museum Palo Verde*	parkinsonia x 'Desert Museum'	
ST-5	Heritage Oak*	quercus virginiana	
ST-6	Date Palm*	phoenix dactylifera	"architectural" groupings
ST-7	Honey Locust*	gleditsia triacanthos	
ST-8	Evergreen Elm*	ulmus parvifolia	

* From Arizona Department of Water Resources Low Water Use / Drought-Tolerant Plant List

Waste, Ash + Recycling Receptacles



WR-1A / 1B



WR-2

WR-1A Victor Stanley 'Ironsites Series', dark bronze powdercoat finish; with option for RECYCLE lid and plaque

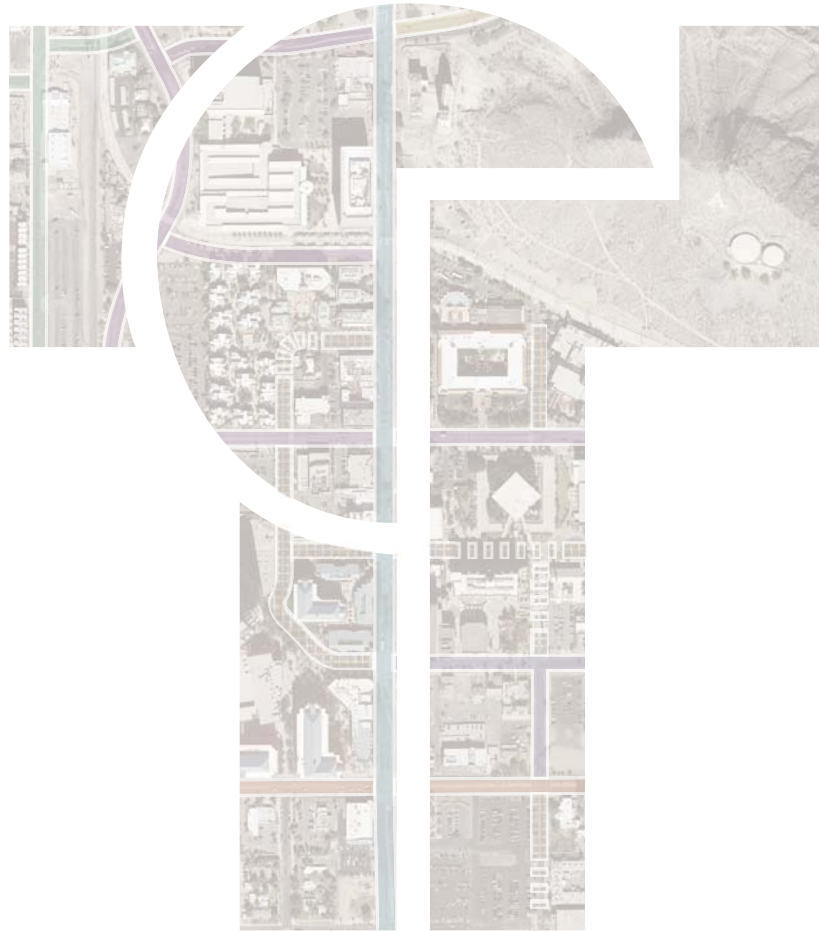
WR-1B Same as WR-1, but with 'Titanium' powdercoat finish

WR-2 Landscape Forms 'Chase Park' Series, 'Silver' powdercoat finish

SELECTION MATRIX¹

	SIGNATURE STREET	RIPARIAN TRANSITION	EXTERNAL CONNECTOR	INTERNAL CONNECTOR	TOWN + GOWN	LIVE/WORK TRANSITION	AUTO COURT
BENCHES	BE-1	BE-3	BE-1	BE-1	BE-3	BE-2	BE-2
BIKE RACKS	BR-1	BR-2A	BR-2B	BR-2B	BR-2A	BR-2A	BR-2A
BOLLARDS	BL-1	BL-3	BL-3	BL-3	BL-3	BL-3	BL-2
GRATES, primary ³ GRATES, secondary ⁴	GR-3A GR-2A	GR-1B or 3B ⁶ GR-2B	GR-3A GR-2A	GR-3A GR-2A	GR-1B or 3B ⁶ GR-2B	GR-2A or 3A ⁶ GR-2A	GR-2B or 3B ⁶ GR-2B
PLANTERS	PL-1B	PL-1A	PL-1B	PL-1B	PL-1A	PL-1B	PL-1A
SIDEWALK PAVING ²	100%	15%	70%	70%	30%	15%	30%
STREET LIGHTS	SL-1	SL-3	SL-1	SL-1	SL-2	SL-2	SL-2
TREES, primary ³ TREES, secondary ⁴ TREES, tertiary ⁵	ST-1 ST-8 ST-2	ST-3 ST-4 ST-7	ST-5 ST-2 ST-8	ST-5 ST-2 ST-8	ST-5 ST-2 ST-6	ST-5 ST-7 ST-8	ST-5 ST-8 ST-6
WASTE, ETC. RECEPTACLES	WR-1A	WR-2	WR-1A	WR-1A	WR-2	WR-1B	WR-1B

- 1 Substitutions may be acceptable where specific products are identified, subject to approval by City Architect.
- 2 Approximate minimum percentage of brick, per typical 100 SF.
- 3 The main, repetitive tree located along a street; regularly-spaced, in grates between street lights.
- 4 Used in accessory planting areas such as parking islands, bulb-outs and medians; typically in grates but not always (may be interchanged with *tertiary*).
- 5 Used, space permitting, as second row behind the *primary* trees, or in adjacent planting areas or as accents; typically not in grates (may be interchanged with *secondary*).
- 6 Use 'PaveGrate' (3) if primary paving material consists of unit pavers; 1B if primarily cast-in-place concrete.



A

P

P

E

N

D

I

X

REFERENCE: Codes, Plans + Standards

Americans with Disabilities Act

Arizona Department of Water Resources Low Water Plant List

- ▼ Phoenix Active Management Area

Arizona State University Comprehensive Development Plan

- ▼ Design Guidelines

Hayden Ferry Lakeside Design Guidelines

Tempe Community Design Principles: Downtown / Mill Avenue District 2006

- ▼ Issues + Observations
- ▼ Vision
- ▼ Precedents + Principles
- ▼ Conceptual Summary

Tempe Downtown Southeast Quadrant Plan (Re-creating a Traditional Downtown) 1996

Tempe Engineering Standards / Design Criteria

- ▼ Retention Requirements
- ▼ Transit-Related Design Criteria
- ▼ Bike Facilities

Tempe General Plan 2030 2003

- ▼ Community Design Element
- ▼ Land Use Element
- ▼ Accessibility Element
- ▼ Historic Preservation Element
- ▼ Neighborhood Element
- ▼ Redevelopment Element
- ▼ Development Element
- ▼ Growth Areas Element
- ▼ Environment Element
- ▼ Transportation Element
- ▼ Open Space Element
- ▼ Public Art + Cultural Amenities Element
- ▼ Public Safety Element

Tempe Mill + Lake District Placemaking Guidelines (PPS) 2007

- ▼ Anchors
- ▼ Building Blocks
- ▼ Neighborhood Places
- ▼ Linkages and Wayfinding

Tempe Multi-Use Path System Detailed Plan

- ▼ Recommended Design Standards
- ▼ General Guidelines

Tempe Rio Salado Landscape Master Plan 1999

Tempe Zoning + Development Code

- ▼ City-wide Streetscape Standards
- ▼ Transportation Overlay District Standards
- ▼ Clear Vision Standards
- ▼ Lighting Standards
- ▼ Sign Standards
- ▼ Right-of-Way Encroachment Standards
- ▼ Access + Circulation Requirements