SYCAMORE STATION

Design Guidelines Booklet Dobson and Main Mesa, Arizona



miravista holdings



February 24, 2017



TABLE OF CONTENTS

Streetscape Design Guidelines	5
Roadway Types	6
Streetscape Elements	
Landscape Design Guidelines	
Open Space Overview	
Signage	
Sustainable Strategies	
Hardscape Materials	27
Street Trees	31
Planting Strips	
Architectural Design Guidelines	
Overview	
Building Form	
Building Types	
Street Level Experience	
Building Elements	



Streetscape Design Guidelines

- A. Roadway Types
 - 1. Primary
 - 2. Specialty Road Central Woonerf

B. Streetscape Elements

- 1. Parallel Parking
- 2. Surface Off-Street Parking
- 3. Curb Walk
- 4. Landscape Zone
- 5. Pedestrian Zone
- 6. Amenity Zone
- 7. Building Frontage

SECTION S: STREETSCAPE

Roadway Types

The purpose of the Streetscape Design Guidelines is to ensure and maintain a consistent, high-quality built environment as streetscape improvements are developed surrounding Sycamore Station. This section includes criteria for streetscape design based on roadway types.

The Right-of-Way Zone addresses design criteria for the streets: travel lanes, bicycle lanes, building frontages, crosswalks and sidewalks. The Roadway Types Diagram shows locations for the various types of streets, which are keyed to the street sections on the following pages. These guidelines address the right-of-way characteristics for the various street types, including vehicular and bicycle lanes, number of lanes, pedestrian areas and crosswalks.

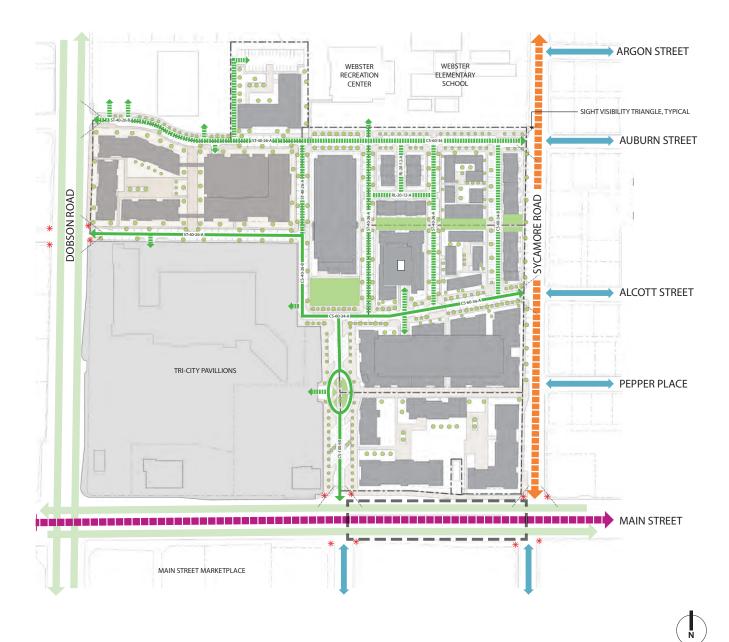
With this vision of a Complete Street in mind, the design of the Sycamore Station area should consider the mobility and safety of all users, ensuring that maximizing traffic capacity and speed is not the dominant consideration in street design. The streets and sidewalks should include elements that provide appropriate visual and physical clues to alert drivers that pedestrians and bicyclists are present and are welcomed users.

Sustainable design elements within the streetscape including stormwater management, native plantings, sustainable materials, and energy efficient lighting which all contribute to the overall character of the streetscape. By integrating Best Management Practices (BMPs) to mitigate stormwater including rainwater tree swales, rainwater gardens in medians, and porous pavement where feasible, stormwater runoff quality can be improved and quantities from impervious surfaces can be reduced. Using native plants reduces the need for potable water for irrigation and contributes to a sense of place by supporting regional wildlife and pollinators. Stormwater runoff is reduced and improved through green infrastructure, so that impurities from road and sidewalk runoff are treated near the source. Trees and plants can be selected and sited to encourage pedestrian use by providing shade and reducing the need for pesticides, herbicides, and fertilizers. Any proposed sustainable practices or alternative methods that deviate or diminish existing City of Mesa Codes and Standards must be reviewed and approved by City of Mesa.

It is important that the streetscape design also reinforces the area's defining character. These guidelines, therefore, recommend choices in material, color, and texture for such components as crosswalks, pedestrian spaces, and sidewalks that are reflective of the surrounding context. A Complete Street design approach, together with necessary physical and visual elements, will ensure Sycamore Station is safer, more livable, and welcoming to everyone. The streetscape guidelines, therefore, address the necessary components of Complete Streets, including:

- General provisions for pedestrian sidewalks, on street parking and the elements that comprise these components;
- Streetscape Zone design criteria for stormwater management, street trees, sidewalks, and all other elements between the curb/edge of pavement and building fronts
- Streetscape palette and materials.

Roadway Types



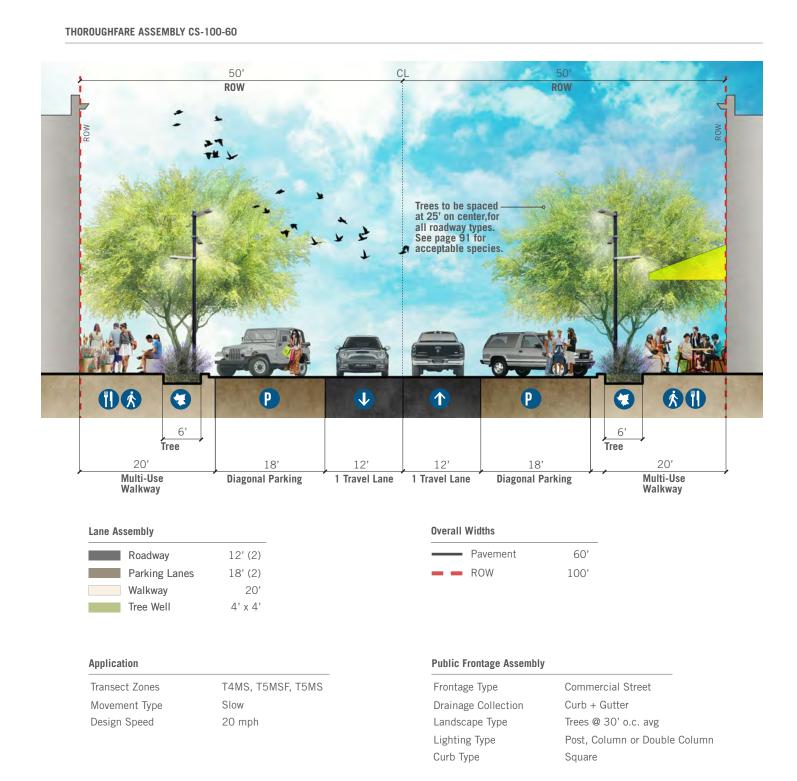
Roadway Types



SECTION S: STREETSCAPE

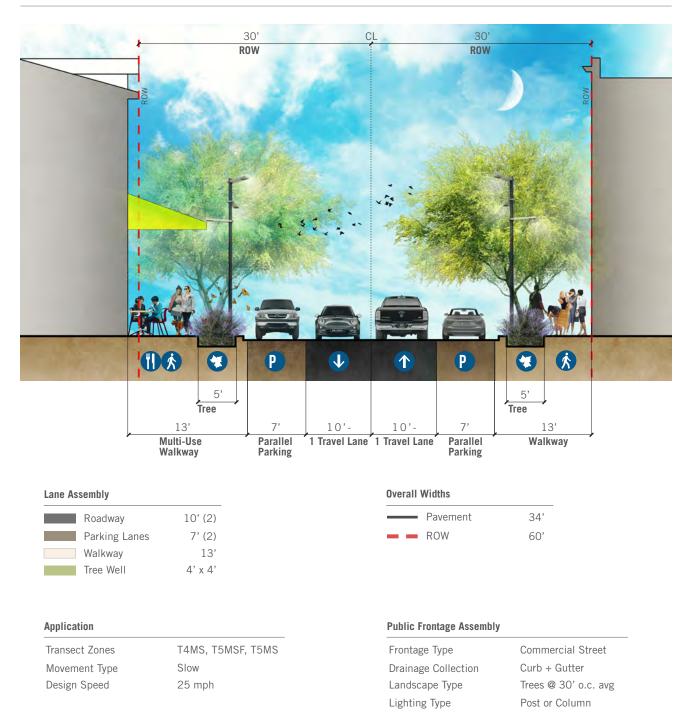
Roadway Types - Primary

Primary Rights-of-way will define the major entrances into Sycamore Station from Main Street, Dobson Road, and Sycamore Road, as active and appealing urban streets. These roadway types will establish a typical Sycamore Station palette of streetscape elements which will help define the overall character and image of the district core.



Roadway Types - Secondary

Secondary Rights-of-way will provide vehicular and non-vehicular circulation throughout the SGCP. These urban streets will connect to the perimeter public streets and internal private streets but will not be the primary circulation thoroughfares. These roadway types will establish a typical Sycamore Station palette of streetscape elements which will define the overall character and image of the district core.

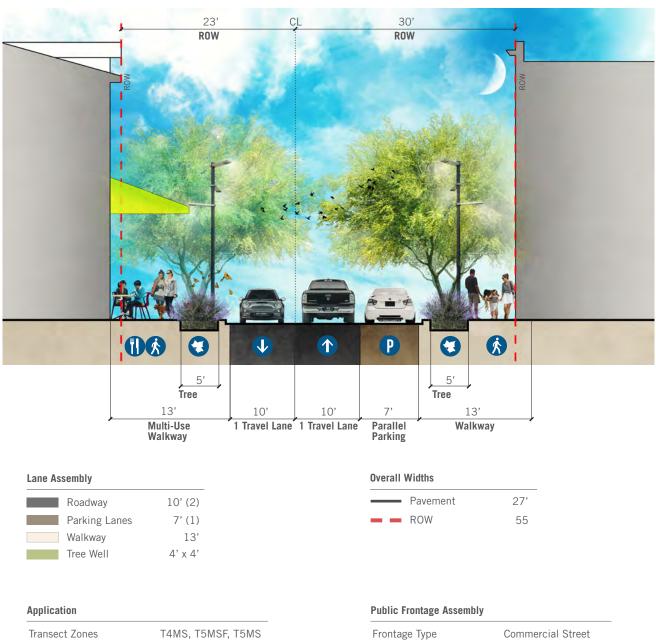


Curb Type

THOROUGHFARE ASSEMBLY CS-60-34

Square

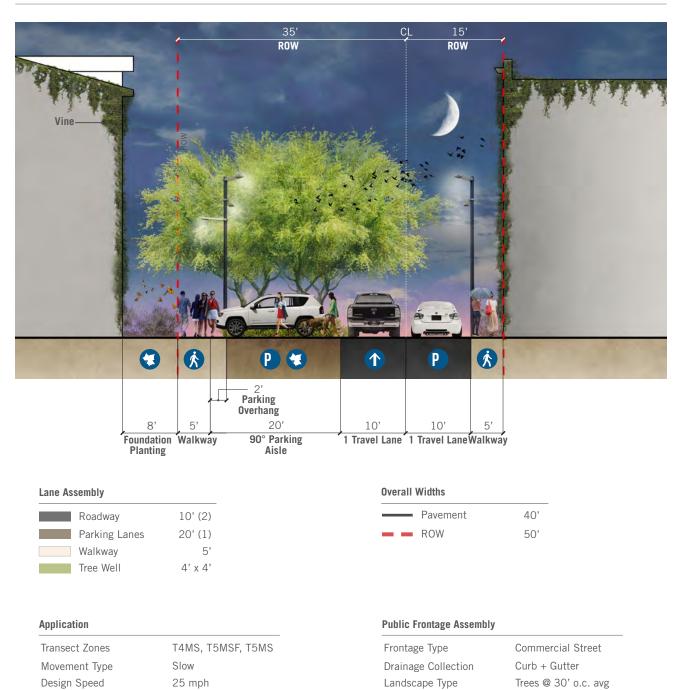
THOROUGHFARE ASSEMBLY CS-60-34 A PRIMARY



Transect Zones	T4MS, T5MSF, T5MS	Frontage Type	Commercial Street
Movement Type	Slow	Drainage Collection	Curb + Gutter
Design Speed	25 mph	Landscape Type	Trees @ 30' o.c. avg
		Lighting Type	Post or Column

Curb Type

Square



Lighting Type

Curb Type

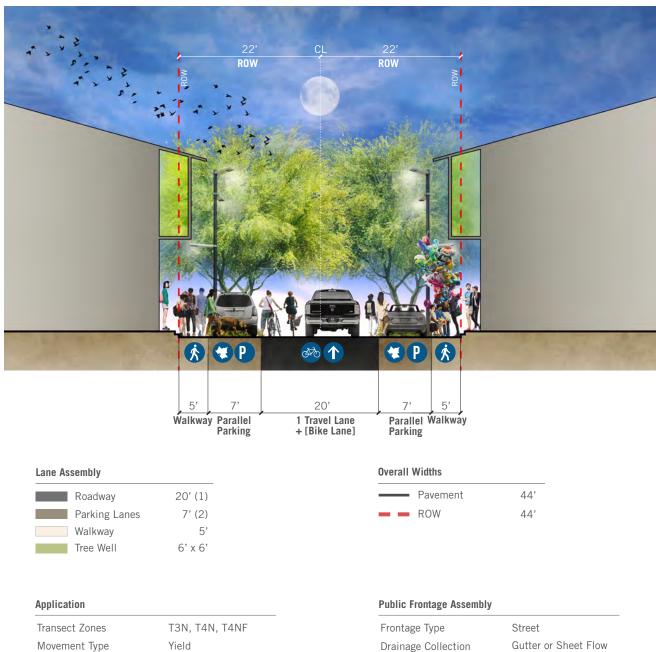
THOROUGHFARE ASSEMBLY CS-60-34 B SECONDARY

Streetscape Design 11

Post or Column

Square

THOROUGHFARE ASSEMBLY ST-40-26 A PRIMARY / SECONDARY

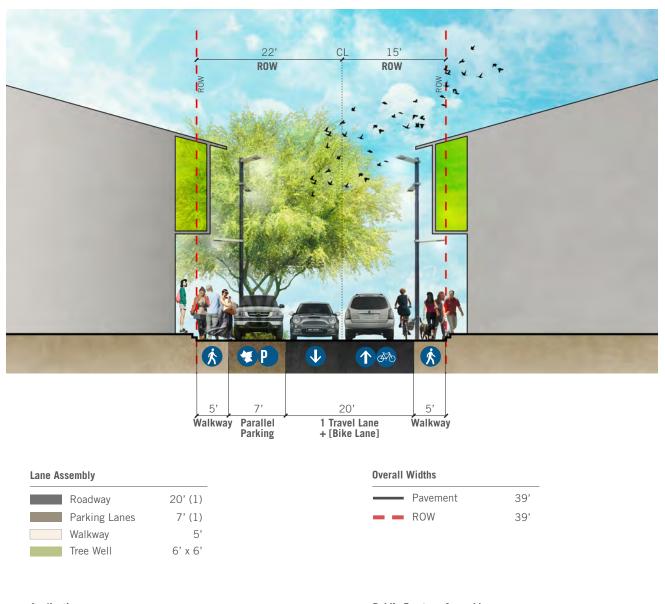


Yield <20 mph

Frontage Type	Street
Drainage Collection	Gutter or Sheet Flow
Landscape Type	Trees @ 50' o.c. avg
Lighting Type	Post or Column
Curb Type	Rolled or Flush

Design Speed

THOROUGHFARE ASSEMBLY ST-40-26 B SECONDARY



Application

Transect Zones
Movement Type
Design Speed

T3N, T4N, T4NF Yield <20 mph

Public Frontage Assembly

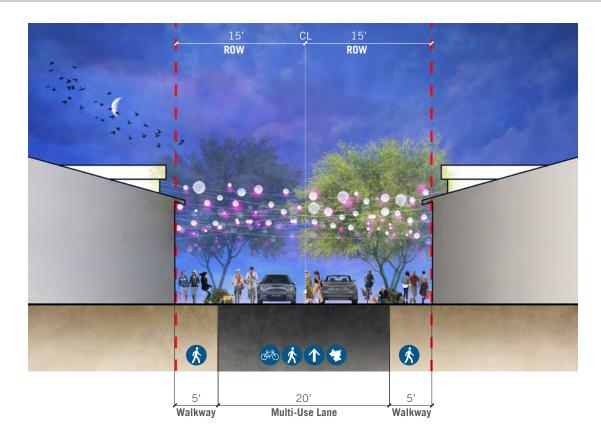
Frontage Type	Street
Drainage Collection	Gutter or Sheet Flow
Landscape Type	Trees @ 50' o.c. avg
Lighting Type	Post or Column
Curb Type	Rolled or Flush

SECTION S: STREETSCAPE

Roadway Types - Specialty Road - Central Woonerf

A Woonerf is a low-speed, shared-surface, complete street that supports traffic calming and establishes a unique sense of place. Equal priority is given to all modes of transportation including automobiles, bicycles, and pedestrians along its length. It is designed without a standard curb and gutter and instead utilizes unit pavers or natural stone to create a sense of a shared, single space. Bollards, street lights, and subtle changes in materials can be used to distinguish drive lanes.

THOROUGHFARE ASSEMBLY RL-20-12 SECONDARY / WOONERF



Lane Assembly

Roadway	12'(1)
Parking Lanes	NONE
Walkway	NONE
Tree Well	NONE

Application

Transect Zones Movement Type Design Speed T3N, T4N, T4NF Yield <20 mph

Overall	Widths	
	Pavement	20'
	ROW	30'

Public Frontage Assembly

Frontage Type	Rear Lane
Drainage Collection	Gutter or Sheet Flow
Landscape Type	NONE
Lighting Type	Pipe or Post (if provided)
Curb Type	Rolled or Flush



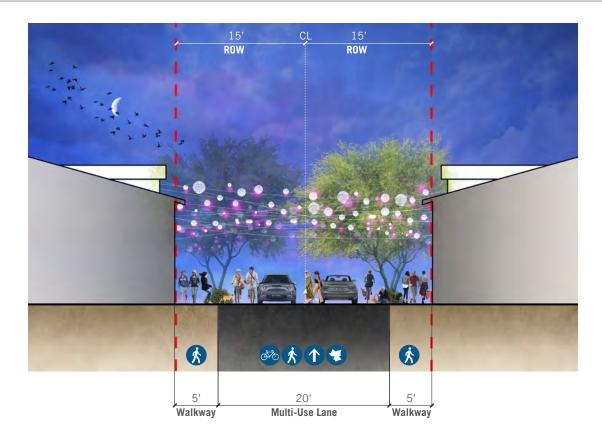
Character of successful woonerfs.

SECTION S: STREETSCAPE

Roadway Types - Specialty Road - Central Woonerf

A Woonerf is a low-speed, shared-surface, complete street that supports traffic calming and establishes a unique sense of place. Equal priority is given to all modes of transportation including automobiles, bicycles, and pedestrians along its length. It is designed without a standard curb and gutter and instead utilizes unit pavers or natural stone to create a sense of a shared, single space. Bollards, street lights, and subtle changes in materials can be used to distinguish drive lanes.

THOROUGHFARE ASSEMBLY RL-20-12 SECONDARY / WOONERF



Lane Assembly

Roadway	12'(1)
Parking Lanes	NONE
Walkway	NONE
Tree Well	NONE

Application

Transect Zones Movement Type Design Speed T3N, T4N, T4NF Yield <20 mph

Overall Widths		
	Pavement	20'
	ROW	30'

Public Frontage Assembly

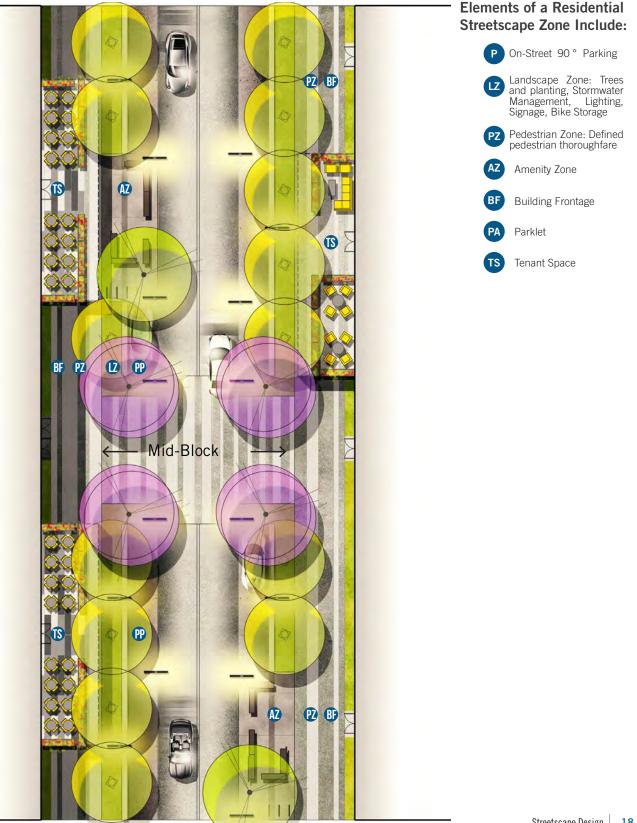
Frontage Type	Rear Lane
Drainage Collection	Gutter or Sheet Flow
Landscape Type	NONE
Lighting Type	Pipe or Post (if provided)
Curb Type	Rolled or Flush



Character of successful woonerfs.

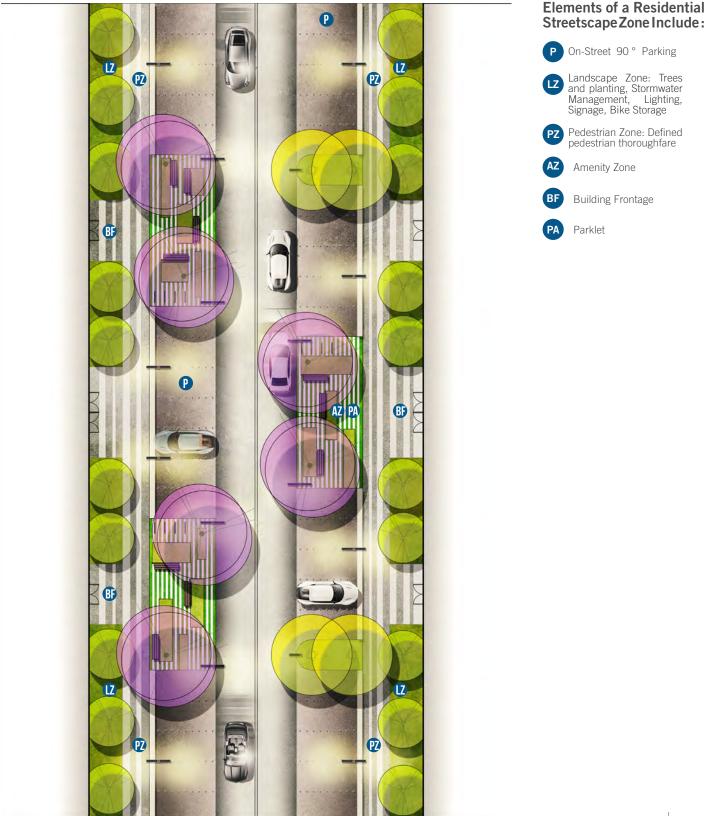
Retail Streetscape Elements

The Streetscape Zone outlines the design criteria for all on-street parking and elements of the sidewalk including curb walks, landscape zone, street and pedestrian lighting, outdoor amenity areas, pedestrian walkways, and building frontage zone. Retail Streetscape characteristics including sidewalk widths, landscape zones, street tree types, amenity areas, lighting, outdoor furniture, paving materials, tenant space, dimensional criteria for the various zones, and other details in accordance with a particular street type are discussed following the Streetscape Zone summary. Mid-block intersections are also part of the Retail Streetscape, encouraging shoppers to visit stores on both sides of the street. Design of streetscape zone, including materials, pattern, and colors, for all streets shall be consistent and compatible with the architecture.



Residential Streetscape Elements

The Streetscape Zone for Residential Streets follows similar guidelines as the Retail Streetscape but on a smaller scale. The sidewalk dimensions are more narrow than retail. On-street parking is at 90 degrees. Landscape zones are more frequent and more pronounanced. The Streetscape Zone Summary covers several elements including curb walks, landscape zone, parklets, street and pedestrian lighting, outdoor amenity areas, pedestrian walkways, and parking. Design of Residential Streetscape Zone, including materials, pattern, and colors, for all streets shall be consistent and compatible with the Retail Streetscape Zone, although some slight differentiation amongst smaller streets in the Residential Zone is encouraged.



Parallel Parking

Parallel parking is an integral component as it activates the streetscape and increases the parking capacity of the site. In most cases parallel parking is to be 7'-0" wide inclusive of a 2' integral curb and gutter.

Surface Off-Street Parking

According to the City of Mesa, surface parking may be paved with asphalt, concrete, paving stone, or masonry. Stalls need to b 9' wide. The length of the stalls depend on the type of stall (e.g. 45 degree, 90 degree, etc.). Please refer to the City of Mesa parking requirements for more information.

Components of Multi-use Walkway

Curb Walk Components of Multi-use Walkway

The curb walk zone ranges from 6"-36" wide inclusive of curb face (depending a street type). This space allows pedestrians flexibility to exit from vehicles with direct access to sidewalks. This zone helps accommodate the vehicle's door swing, eliminating conflict with site furniture, signage, lighting or landscape. The curb walk for all public streets should reflect the materials and patterns used throughout the district.

Landscape Zone

Landscape Zone is at a minimum 5' wide and shall use a diverse selection of site appropriate plants as outline on pages 90-91 of this document. Other permanent amenities such as planters, light poles, street signage, benches, bike share station, and bike racks. This zone may also incorporate non-permanent elements, including restaurants menu signs, waste receptacles, potted plants, and additional seating. Additionally, this zone should be fully paved adjacent to a transit stop. Where conditions warrant, the Landscape Zone may be 5' wide by a minimum 12' long. In no instance shall a planting zone be less than 48 square feet.

Pedestrian Zone

The Pedestrian Zone in the residential area is a minimum 5' wide clear path. This zone is reserved for the use of pedestrian circulation and should be clearly differentiated by paving materials or other visual cues. Planting strips tend to be wider in residential areas than in retail pedestrian.

The circulation for retail pedestrian zones should be a minimum of 8' wide and close to the storefront windows. Barriers (such as planters or benches) between the pedestrian and the road provide an extra layer of safety. Mid-block crossings provide access to shops on either side of the street and are opportunities for landscape areas.

Amenity Zone

The Amenity Zone can range from 3-12' wide (3-5' for smaller bistro tables or 4-12' for larger dining tables). This zone is reserved for amenities that may be customized depending on adjacent uses. Typical amenities include, but are not limited to, café tables, benches, planters, street trees, lighting, wayfinding signage, bollards, trash and recycling receptacles, and bike racks. The Amenity Zone is optional; this zone is encouraged where heavy pedestrian traffic for dining or entertainment uses is anticipated and can occur within the Landscape Zone.

Building Frontage

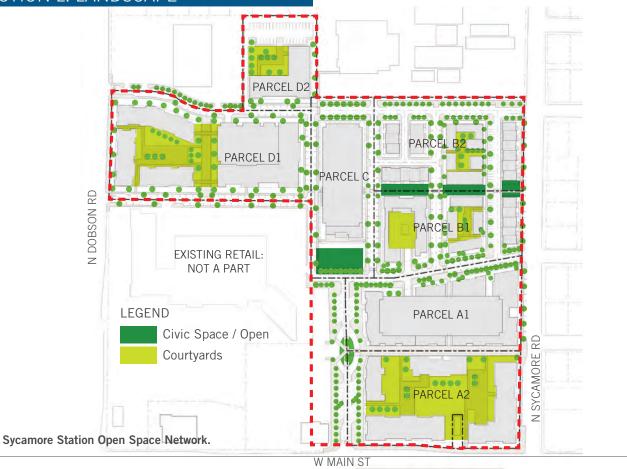
The Building Frontage Zone should be a minimum of 2' wide and is reserved for the building tenant/owner. This zone is adjacent to the building frontage and may be used for signage, sidewalk displays, benches, stoops, and planters or to accommodate door swings and projecting window bays. This zone may be part of the pedestrian zone, as long as a minimum of 5' clear is reserved for pedestrian movement.



Landscape Design Guidelines

- A. Open Space Overview
 - 1. Neighborhood Square
 - 2. Greenway
 - 3. Dog Park
- B. Signage
- C. Sustainable Strategies
 - 1. Stormwater Management
 - 2. Alternative Transportation
- D. Hardscape Materials
- E. Street Trees
- F. Planting Strips

SECTION L: LANDSCAPE



Open Space

Public open spaces in urban areas assume many forms, such as plazas, parks, squares and greenways. These spaces can differ substantially in type, particularly with respect to programming, character, size, landscaping and uses. When planned as a system, public open spaces should provide a range of activities to meet the needs and interests of the community. A well-designed system will appeal to people of all ages and encourage social gatherings.

The goals established by the Smart Growth Community Plan (SGCP) are to create well-designed public open spaces that will contribute significantly to the quality of life within Sycamore Station, its surrounding community and the city of Mesa. The SGCP calls for the creation of walkable urban projects. These projects provide pedestrian walkways, multi-use paths, and a variety of green open spaces accessible to both residents and the public. The SGCP focuses on improving the quality and utilization of public open space, whether new or proposed, by increasing accessibility, visibility, programming and appearance. Recommended build- to lines are also established to define the proposed open spaces that will have limited flexibility in location and orientation, and are illustrated to represent the approximate demarcation between the public open space and sidewalk. The following principles were developed to achieve the stated goals for open space within Sycamore Station:

Open Space Principles

- Ensure open spaces are accessible, usable, and designed to be safe and secure.
- Distinguish effectively between private and public spaces by reinforcing a strong sense of openness and accessibility in those spaces planned for public use.
- Provide new development areas with high durability landscape features, using a blend of plant species.

• Locate retail plazas and parks so they have direct access to the street; office

plazas and landscaped street setbacks are less desirable.

- Encourage and expand opportunities for festivals, concerts, farmers markets, food trucks, and other activating uses, particularly for the Sycamore Station area.
- Incorporate handicap accessibility across the open space system
- Public art should be incorporated into the architecture and open spaces of the district core, and artistic lighting could highlight Sycamore Station during the evenings.
- Crime Prevention through Environmental Design (CPTED) principles shall guide the design of Sycamore Station.
- Use sculptural solar elements to educate visitors about environmental conservation and supply power lighting and pavilions within the Sycamore Station
- Low Impact Design (LID) features could include pervious paving, water filtration gardens, and cisterns within Sycamore Station and adjacent buildings to capture rainwater for landscape irrigation.



Neighborhood Square

The neighborhood square is the signature programmable space designed as a communal destination for those who live and work nearby. The open spaces should be treated with a high level of finishes, incorporating a variety of materials such as brick, stone, and specialized pavers to reinforce the character of Sycamore Station

The layout of the space should provide flexibility and opportunities to host a variety of events for its users while also incorporating street parking, access for service vehicles, and infrastructure for major public events. The landscape should include flexible public open spaces, outdoor seating, shade trees/shade structures and a diversity of landscape elements (water features, gardens, play spaces, bicycle infrastructure).

Sustainable design elements should be integrated such as innovative stormwater management features, incorporation of native plant materials to minimize water usage and/or need for irrigation, and the use of local and regional materials to establish a character and unique sense of place for the district core. The neighborhood square should be an anchor in the community for various



Character of Sycamore Station Neighborhood Square.

SECTION L: LANDSCAPE



Greenway

This linear open space acts as a continuation of the pedestrian linkage from the Neighborhood Square to the retail area. In addition, the greenway connects the residential area to the retail area and public transportation. As a formal entry to the site, this open space amenity will be the most heavily planted in the district.

Design Performance

1. The greenspace should be constructed using low impact materials, preserve mature existing trees, and incorporate native plant material that is appropriate for City of Mesa.

2. The side portions of the park should incorporate minimal parking, pedestrian walkways, and bike paths with significant planting buffer between the park and retail area.

3. The greenspace should be accessible to all users and incorporate spaces for both leisurely activity as well as welldesigned pathways for daily circulation.

4. Clear connections should be made to and from the light rail station and other forms of mass transit.

5. If there is adequate space, site furnishings such as benches may be added to the Greenway to provide respite areas for the users. Good lighting is also important to ensure the safety of participants.



Character of Sycamore Station Greenway



Dog Parks

Increasingly, dog parks are becoming an appreciated amenity in high-density areas. As more of the population gives up large yards for smaller urban housing, they are looking for ways to keep their pets healthy and happy. Dog parks or dog runs provide outlets for urban pets. At the same time, they provide opportunities for social interactions among neighbors.

Design Performance

1. A dog park or dog run should be in a shaded area with a minimum 6' fence surrounding the area. A double-gated section is preference at the entry to prevent accidental dog escapes and easier wheelchair access.

2. Users should be provided with clean up equipments such as covered garbage cans, waste bags and waste scooping equipment.

3. Site furnishings such as benches and tables provide areas for owners to sit and socialize.

4. A water source is important so animals don't get overheated.

5. Neighbors will also appreciate signage stating park hours (such as "no-bark" times) and rules of the park.

Note: Final location of specific dog parks to be reviewed and approved by City of



Character of Sycamore Station Dog Park

SECTION L: LANDSCAPE



Signage

Sycamore Station will display a hierarchy of signage that range from the decorative to the informative to the regulatory. All signage in the community should have a consistent look and be complimentary to architecture and landscape design

Design Performance

1. Monument signs should be displayed at major entrances such as along Main Street, Dobson Road, and Sycamore Road.

2. Street signs should be easy to read and identify on both public and private roads. Height, color, and font should be the same so that drivers and pedestrians can navigate easily.

3. Complete wayfinding signage systems include maps, symbols, and directories. The colors, design, and style should fit the style of the architecture. More modern wayfinding signage integrates technology such as mobile applications. Signage should be designed and focused for pedestrian use.

4. Tenant signage will be high-quality and compatible with the architectural quality of Sycamore Station.

5. All regulatory signage (such as ADA signs) will comply with the City of Mesa code.



Note: Master Signage Plan to be completed at a later date.

Character of Sycamore Station Signage

Sustainable Strategies

Stormwater Management

Open space and streetscapes that deviate or diminish existing City of Mesa Codes and Standards must be reviewed and approved by the City of Mesa. Sycamore Station are planned to advance sustainable practices. They should comply with the regulations and best management practices per City of Mesa not only in public right-of-ways but in development sites within Sycamore Station to support a comprehensive approach to stormwater management. Furthermore, landscape improvements should utilize low-impact development techniques (LID) and manage water as close to the source as possible. Plantings and vegetation in green spaces surrounding buildings should incorporate native species and sustainable measures. Any proposed sustainable practices or alternative methods that deviate or diminish existing City of Mesa Cosed and Standards must be reviewed and approved by City of Mesa. Other sustainable strategies include:

1. Minimizing stormwater runoff from the surrounding streets, parking lots and buildings.

2. Limiting post-development net gain in runoff volume.

3. Installing porous and permeable pavements in hardscape and some parking areas to absorb rainwater.

4. Harvesting and reusing rainwater through the use of water conservation techniques.

5. Using recycled products.

6. Implementing soil management techniques.

7. Adopting and integrating renewable energy measures where applicable, including – but not limited to – solar-powered landscape lighting.

8. Incorporating green roofs into building designs.

9. Placing bioretention features adjacent to hardscape areas, such as streets, sidewalks and parking lots, to store and filter stormwater runoff and allow it to infiltrate within the site.

10. The City's stormwater requirements are to be met for both water quality and water quantity during planning, design and construction.

11. Proposals for sustainable or infiltrative SW practices should include analysis for identifying effective long term operations and maintenance actions and resources.





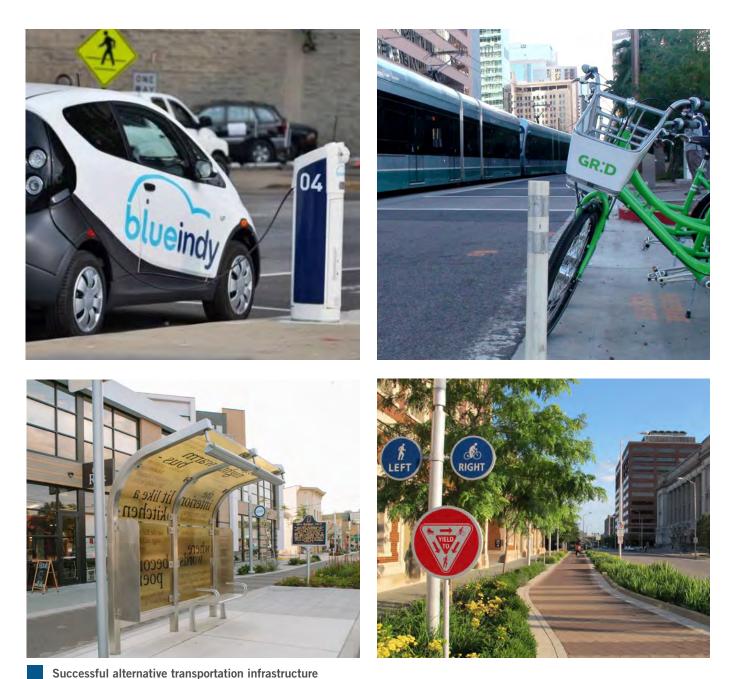






Alternative Transportation

Sycamore Station should support multiple forms of transportation through an interconnected system spanning the entirety of the site and working within streetscapes, open space, and existing infrastructure. A comprehensive approach will make the site more accessible to users and more environmentally friendly through the reduction of single user vehicular traffic. Transportation infrastructure should align best managements practices and regulations. These techniques should have an even distribution across the site and react to major points of interest in order to assure an ease of use and the necessary visibility.



Hardscape Materials

Sidewalks

A primary streetscape sidewalk material, pattern, and color should be consistent throughout the Sycamore Station precinct and denote the clear, unobstructed circulation route. Beyond the clear pedestrian zone of the sidewalk, restrained use of different paving options to denote the other uses of sidewalk areas by varying material, pattern, color, and/or texture is encouraged. For example, where a sidewalk adjoins a plaza seating area, a change in paving type differentiates a movement zone from an area of rest. Unlike the more uniform streetscape, hardscape areas within amenity spaces may differ from and contrast with the typical sidewalk paving.

» The clear pedestrian zone of the sidewalk should be consistent in material, pattern, color, and/or texture with Main Street. Changes to the paving material, pattern, color, and/or texture should occur between different zones and uses of the sidewalk, and, where an amenity space abuts the sidewalk.

» Streetscape sidewalks shall be constructed with natural concrete or brushed concrete or masonry concrete unit pavers with accents of concrete pavers; Materials should consist of neutral colors.

» Porous pavement systems are also permitted where appropriate, however, pervious asphalt is not allowed for sidewalks



Paving Character



Pedestrian sidewalk zone





Variations in paving type/sizes to define zones (planting, furniture, amenity, landscape)

SECTION L: LANDSCAPE

Crosswalks

All improved street intersections should include crosswalks and depressed curbs connecting to existing sidewalks or new sidewalks, except in limited situations, where there is no traffic control device. Crosswalks should be of a different paving material, texture, or color from the street paving and establish a coordinated and unified aesthetic. Design of secondary street crosswalks should compliment existing primary street crosswalks. All crosswalks shall be the same with a minimum of 10' wide.



Vehicle Drop-off/Lay-By

Vehicle drop-off or pull-off zones should be either consistent in material with the travel lane paving, or, differentiated through a change in material (preferred). In addition the edge separating the travel lane from the drop-off should be defined by a band denoting a border.

Parallel Parking

Parallel parking paving should be either consistent in material with the travel lane paving, or, differentiated through a change in material (preferred). Additionally, an edge band denoting the border between the travel lane and parallel parking spaces is encouraged and can be differentiated by either color or material.

Loading/Service

Curb cuts and access drives will be required for loading and servicing a building; at these locations, the sidewalk material(s) should be carried across the access drive, where possible. Variation in streetscape materials or use of bollards may be incorporated to identify loading and service areas and provide safety for pedestrians.



Site Furnishings

Benches, Tables and Chairs

Outdoor seating is an important element in a vibrant, welcoming environment, providing places for social interaction and repose. Benches along the street edge that are part of the street furnishings should be uniform and consistent throughout Sycamore Station. Benches, tables, and chairs belonging to commercial or institutional tenants or within adjacent amenity space should be unique and expressive of the overall composition and character of the building or storefront. Opportunities for benches to serve as public art pieces are strongly encouraged.

» Benches should be surface-mountable or able to be embedded in paving. Tables and chairs should be movable.

» Benches along the street edge that are part of the street furnishings should be metal (aluminum, steel, or cast iron) and consistent in material, style, and color with the other street furnishings, including street lights, bollards, and trash/recycling receptacles.

» Benches, tables and chairs belonging to commercial tenants should be metal (aluminum or steel), a combination of wood and metal, stone, or other durable material.

» Materials with a high percentage (75% or more) of recycled content are encouraged.

» For benches also serving as public art, other materials may be approved.

Pots and Planters

Pots and planters should add interest, color, and pedestrian scale to the streetscape. Low-maintenance planters with perennial and annual plantings are encouraged within Sycamore Station. Movable pots and planters should be used where permanent planters may limit the versatility and use of a sidewalk area. Pots and planters belonging to commercial or institutional tenants should reflect the unique character of each building or storefront.

Opportunities for pots and planters to serve as public art pieces are strongly encouraged.

» Pots and planters should be of a durable, low maintenance material.

» Pots and planters should not impede pedestrian circulation or block visibility.







SECTION L: LANDSCAPE

Tree Grates

Tree grates are appropriate within the streetscape or private properties where high pedestrian activity is anticipated.

» A minimum of 80 square feet (250 Cubic Feet per tree) of planting soil is recommended where tree grates are used: this may include multiple tree grates that cover the planting pit, or paver grates.

» Tree grates should be properly maintained and cleaned for the safety of visitors and for the welfare of the trees they protect.

» As part of the streetscape, tree grates should be consistent in material, style, and color with the other street furnishings, including street lights, bollards, and trash/ recycling receptacles.

» Tree grates shall be able to be easily modified to allow for future tree growth.

Fencing and Site Walls

Fences and site walls can be used to define private spaces, mediate grade, and conceal parking, loading, service, and trash areas.

» Fences and gates within the streetscape zone should be metal (aluminum, or steel) and consistent in material, style, and color with the other street furnishings, including street lights, transit shelters, benches, and trash/recycling receptacles. Fencing to define "outdoor dining or amenity zones" shall not obstruct the pedestrian sidewalk zone and shall not be permanent.

» Chain link fencing (except where required by law for temporary security), barbed wire, and paneled materials are not permitted.

» Site walls should use materials, patterns, and colors consistent with the surrounding streetscape materials or building architecture and, if visible from streets or amenity space view, should be brick, pre-cast, stone, cast stone, or vegetated screen wall.

» Straight-faced decorative architectural block retaining wall may also be used if site conditions warrant.

» Pre-cast, stacking block wall systems are not permitted

» Fences and wall cannot intrude on the clear-sight triangle at intersections

Waste/Recycling

Waste and recycling receptacles should be coupled together and should be conveniently located where high pedestrian activity is anticipated.

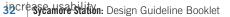
» Waste and recycling receptacles should be coupled together

» For sanitation purposes, receptacles should have a rain guard over the main opening and should conceal the main recycling or trash container.

» Trash/recycling receptacles along the street edge that are part of the street furnishings should be metal (aluminum or steel) and consistent in material, style, and color with the other street furnishings, including street lights, benches, and bollards.

» Trash/recycling receptacles belonging to commercial or institutional tenants may vary, but should be metal (aluminum, steel, or cast iron) or a combination of wood and metal.

» Trash/recycling receptacles should be top loading rather than side loading to











Street Trees

Street trees should be planted at regular intervals along streets per the City of Mesa standards, appropriate to the particular character and function of the street (see Street Tree Plan on page 92). In general, trees should be planted 25' feet on center and should meet at least 50% of the required shading within 4 years and the full shading within 8 years. Variation in tree spacing may be appropriate in some circumstances, depending on location and adjacent uses, underground utilities, and above ground structures.

Street trees of the same genus and species should be planted continuously and along both sides of an entire street. In some instances, where a natural change in species seems logical due to an adjoining amenity space, civic building, or other important feature, a change in species may be appropriate. Genus and species should differ from street to street to add variety, biodiversity, and interest. No more than 25% of trees on site are to be of the same species to prevent future devastation from insects.

Specific tree species should be selected from the City of Mesa Tree Selection Guide. Preference should be given to drought tolerant plants. Minimum box size is listed at the City of Mesa. Minimum caliper size can be found in the Arizona Nursery Association manual. Minimum box size shall not be less than 36".

» Street trees should have straight, true trunks. Multi-trunk trees are not recommended as street trees. See City of Mesa landscape requirements for tree size and minimum caliper.

 $\,$ » As street trees mature they should be limbed to a minimum of 8' clear.

» Flowering street trees should be selected for areas where limited pedestrian and/or outdoor dining activity is anticipated to minimize the impact of bees, insects, and falling debris.

» At retail storefront zones, trees should be selected that do not have a dense canopy.

» Curb cuts and access drives will be required for loading and servicing buildings in Sycamore Station; at these locations, selection of tree species and placement should accommodate these access drives. Street trees should be limbed to avoid conflict with loading/ service traffic.

PLANTING OVER STRUCTURE

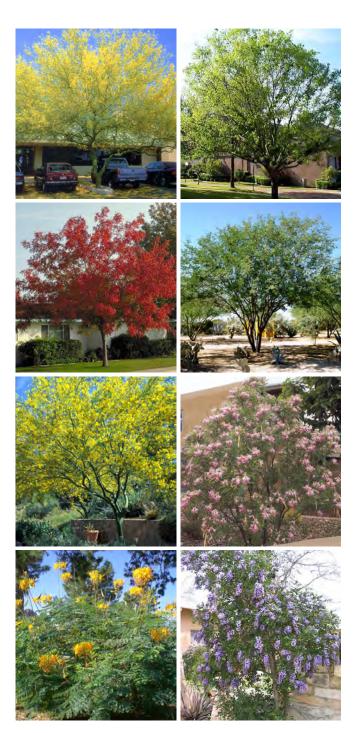
» Structural soil should extend under sidewalks adjacent to trees to allow for horizontal root growth.

» A minimum soil depth of 3 feet should be provided for all trees.

» Soil volume of 2 cubic feet of soil per square foot of canopy area at full tree maturity should be provided for all trees.

» A minimum soil depth of 18" should be provided for all shrubs.

»Percentages of landscape requirements within private

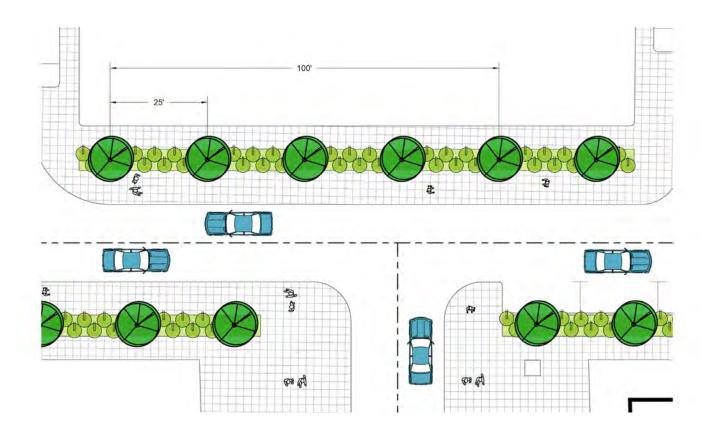


Suggested Tree Palette

(Please see City of Mesa Tree Selection Guide for complete list)

Cercidium praecox Ulmus parvifolia Pistacia chinensis Prosopis velutina Cercidium hybrid Chilopsis linearis Caesalpinia mexicana Sophora secundiflora Palo Brea Evergreen Elm Chinese Pistache Velvet Mesquite Hybrid Palo Verde Desert Willow Mexican Bird of Paradise Texas Mountain Laurel

SECTION L: LANDSCAPE



Street Tree Plan

Landscaping along the streets should provide a variety of groundcover, shrubs, and trees. The above illustration shows a typical street tree plan for Sycamore Station. According to the City of Mesa, the spacing is the same for arterial streets (110'-130'), major and midsection collector streets (90'-110'), collector/industrial/commercial streets (60'-80'), and public or private local streets (less than 60'). The minimum required plants for these streets are one tree and six shrubs per 25 linear feet (4 trees and 24 shrubs per 100'). See City of Mesa Zoning Ordinance for more information.



Planting Strips

Tree wells should be regularly spaced along the streetscape to include street trees. Tree wells should be a minimum of 60 square feet per individual tree and a minimum of 5 feet wide; A 5' width is permitted only in limited locations where physical constraints may require narrower planters, and subject to approval. In some instances, where limited pedestrian activity is anticipated, a continuous planter may be accommodated to include 2 or more trees. Continuous planting strips should only be used on frontages with lower intensity and where there is no adjacent on-street parking.

In addition to street trees, planting strips may be planted with preferably native, low ground cover and/or shrubs. Tree planters may also be planted with perennials and annuals; again, native or adaptive plant species are encouraged. Plantings should be limited to a maximum height of 30" for visibility and concerns. Tree planters may not be raised. They may include a low, 8" to 12" decorative fence to protect the tree and plantings in areas of heavy pedestrian traffic. The design should be consistent along the street and for the entire block; variations from street to street are encouraged. Where tree grates are used in lieu of planters, the minimum 60 square feet per tree is still required. This area may include multiple tree grates that cover the tree planter, allowing for air and water circulation, while still accommodating intense pedestrian activity. It is important to restrict pedestrian foot traffic around the tree to prevent soil compaction. Above ground tree planters are to be limited to plaza areas, and should only hold small ornamental trees.

Foundation Plantings

Along a street, where the foundation of a building does not have storefront and/or entry doors, foundation plantings are suggested. Foundation plantings or planters should separate residential windows form the adjacent sidewalk. Raised planter boxes shall be 5 feet minimum from drive aisles and parking stalls. Planters for trees should be a minimum of 8 feet wide. Other planting should be in planters at least 3 feet wide. Native shrubs, groundcover, perennials, and annuals are encouraged. In some instances, small flowering trees may be permissible. All plantings should be selected so that their mature height does not extend excessively above the ground level window sills. Foundation plants shall be planted where appropriate and be used for screening between residental and public spaces at grade. Please see City of Mesa Lanscape Guidelines for plant material options. Plants should be selected and placed within the planting areas creating a layered composition with lower shrubs/groundcover at the sidewalk edge transitioning to taller shrubs near the building. Lawn is not permitted along primary frontages.



Sample Shrub, Accent, and Groundcover List (Please see City of Mesa and ADWR for complete list)

Leucophyllum laevigatum Russelia equisetiformos Tecoma stans Salvia species Ruellia species Pedilanthus macrocarpus Rosmarinus officinalis Lantana species Chihuanuan Sage Coral Fountain Orange Bells Autumn Sage Desert Ruellia Slipper Flower Bush Rosemary Lantana New Gold

Architectural Design Guidelines

A. Overview

- B. Building Form
 - 1. Height, Massing & Volume
 - 2. Stepbacks
 - *3. Collaborative Spaces*
 - 4. Parcel Design Criteria
- B. Building Types
 - 1. Existing Buildings
 - 2. New Construction
- C. Street-Level Experience
 - 1. Building Entries
 - 2. Retail Storefronts
- D. Building Elements
- E. Green Roofs
- F. Materials



Overview

The purpose of the following Architectural Design Guidelines is to establish general building design criteria and define the character of the built environment for thr Sycamore Station Smart Growth Community Plan (SGCP), while also allowing for design flexibility and creative architectural expression and solutions. The criteria outlines general height, massing, and facade characteristics for each parcel of new development that reinforce the overall goals and vision for the Sycamore Station.

All applicable building codes, laws, acts, accessibility guidelines, and environmental regulations must be followed.

Building Form

Height, Massing, and Volume

Critical to creating a dynamic urban environment is exciting architecture. The physical form proposed by the Sycamore Station SGCP calls for a mix of mid-rise and low-rise structures representing multiple building types to create a richly-textured and varied urban and pedestrian experience. A variety of scales and forms within the plan are fundamental to its urban vibrancy.

Larger building masses should be broken down into multiple vertical and horizontal volumes. The articulation of monolithic structures as a collection of smaller parts will help create a more comfortable, human-scaled district character, allowing the development to feel as if it was created incrementally and built up over time. Special attention and priority should be given to the ground level of all buildings to enhance the pedestrian experience.

Facades and building elements that terminate prominent streets and view corridors provide symbolic gestures and orienting devices in the urban context and should be treated with architectural significance.

Building Stepbacks

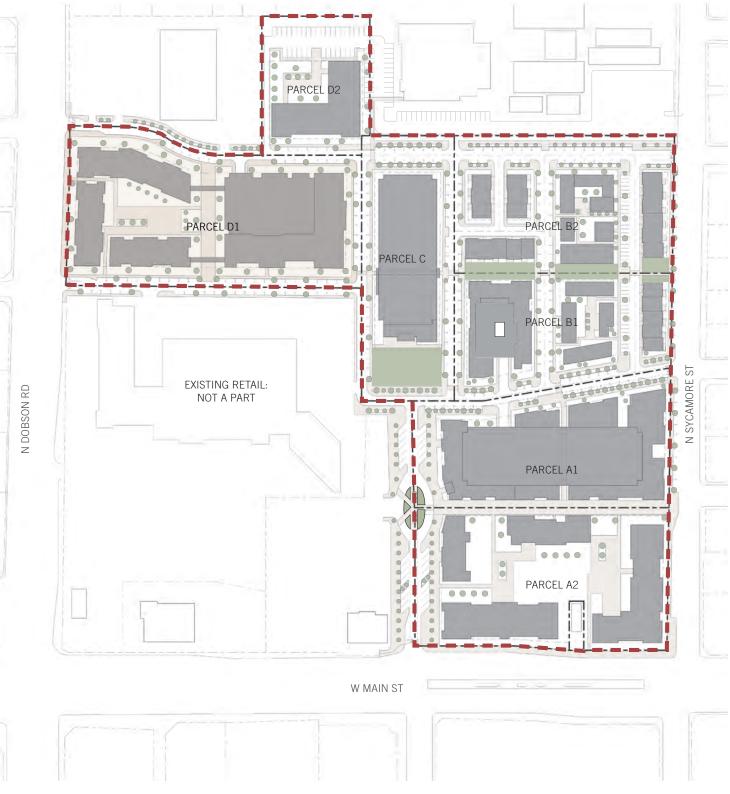
Stepbacks and recommended build-to lines are tools that can be used to control building massing and form by reducing the bulk of the building and its appearance on the street. This allows for a more harmonious streetscape experience even in the presence of a variety of building scales and sizes.

Private, Collaborative, and Convergence Spaces

Architecture of the Sycamore Station SGCP should express the ethos of variety, connection, interaction and complexity within the context of an urban residential platfrorm. This residential platform will create interior and exterior spaces for residents and visitors to converge and connect. These spaces shall be carefully planned and utilized as opportunities for unique architectural expression including transparency and volumetric projection.



Conceptual site massing model based on Sycamore Station Community Growth Plan.



Sycamore Station Guidelines: Boundary and Parcel Designations.

PARCEL A1 - T5MSF Transect

Design Criteria:

- 5 Stories height max. (max. 55')
- 300 units max (combined with Parcel A2)
- 50 units/acre
- Stepbacks: Please reference Parcel A1 in SGCP for required setbacks. No step backs are required.
- Building Type: Mid-Rise
- Parcel Size: 2.03 acres net; 3.01 acres gross
- Frontage Type: Stoop, Forecourt, Dooryard, Arcade, Gallery, Shopfront, Terrace

architecturally screened Service and vehicular access ideal along north frontage Above-grade parking structure to be concealed with occupiable space Create strong corner expressions by shape, material or volume shifts

Areas not concealed to be

D

E

н

J

Κ

Minimize setbacks along street edges per SGCP to enhance urban context and define strong street edges

Major relief shall be included to break up facade

- G Minor relief shall step in building plane, balconies to be included to reduce scale of facade and convey interior use
 - No vehicular entry from west side

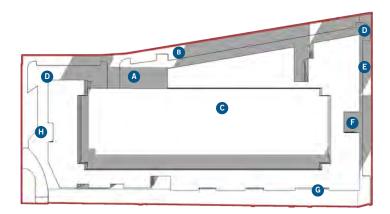
Variation in architectural expression

Shade components at grade level

Base component different than main body of building

Variation of fenestration types

High degree of transparency at ground plane encouraging interaction







PARCEL A2 - T5MS Transect

Design Criteria:

- 5 Stories height max. (max. 85')
- 300 units (combined with A1)
- 50 units/acre
- Stepbacks: Please reference Parcel A1 in SGCP for required setbacks. No step backs are required.
- Building Type: Mid-Rise
- Parcel Size: 2.66 acres net; 3.42 acres gross
- Frontage Type: Stoop, Forecourt, Dooryard, Arcade, Gallery, Shopfront, Terrace

В

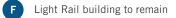
D

G

Create open courtyard space for residents

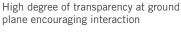
Encourage breaks in building to increase visibility and access to open courtyard areas

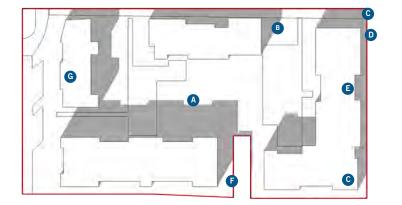
- Create strong corner expressions by shape, material or volume shifts
- Minimize setbacks along street edges per SGCP to enhance urban context and define strong street edges
- Minor relief shall step in building plane, E balconies to be included to reduce scale of facade and convey interior use

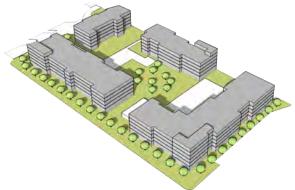


- Residential/Retail ready at ground plane
- Variation in architectural expression Н
 - Shade components at grade level
 - Variation of fenestration types

Κ







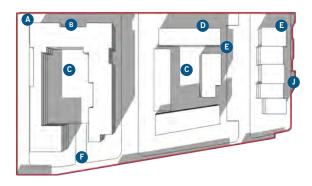


PARCEL B1 - T4NF Transect

- Height: 3 Stories (max. 40' 52')
- 15-20 units/acre
- Stepbacks: Please reference Parcel A1 in SGCP for required setbacks. No step backs are required.
- Type: Main Street, Mixed-Use, townhouse, Courtyard Building
- Minimum of two building types on this parcel with no more than 60% of one type
- Frontage Type: Porch: Projecting, Porch: Engaged, Stoop, Forecourt, Gallery, Arcade, Dooryard



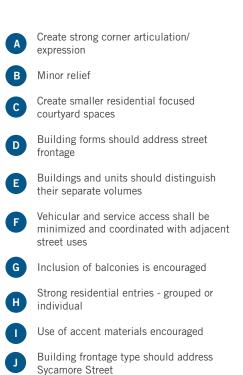


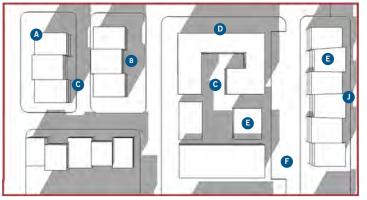




PARCELS B2 - T4N Transect

- Height: 3 Stories (max. 40')
- 10-20 units/acre
- Stepbacks: Please reference Parcel A1 in SGCP for required setbacks. No step backs are required.
- Minimum of two building types on this parcel with no more than 60% of one type
- Parcel Size: 1.09 acres net; 2.93 acres gross
- Frontage Type: Porch: Projecting, Porch: Engaged, Stoop, Forecourt,, Dooryard,





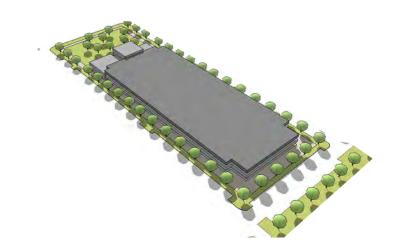


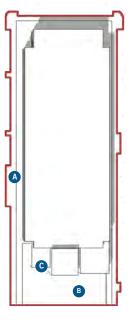


PARCEL C - T5MSF Transect

- Height: 3 Stories (max. 45')
- 250 parking spaces
- *includes area for community civic space
- Stepbacks: Please reference Parcel A1 in SGCP for required setbacks. No step backs are required.
- Building Type: Community Parking Facility, Ground Floor Commercial/Retail
- Parcel Size: 1.22 acres net; 2.46 acres gross
- Frontage Type: Screened Garage, Arcade, Gallery, Shopfront



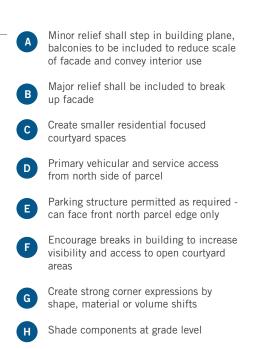


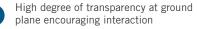


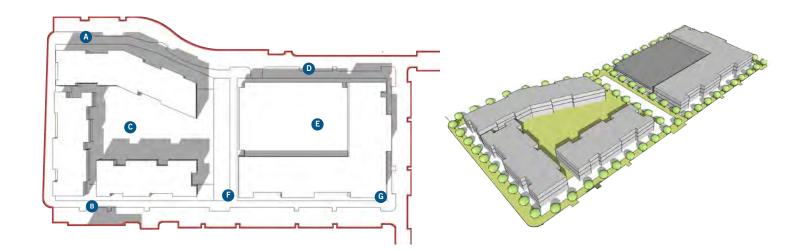


PARCEL D1 - T5N Transect

- Height: 4 Stories (max. 55')
- 125-200 units
- 200 parking sapces
- Stepbacks: Please reference Parcel A1 in SGCP for required setbacks. No step backs are required.
- Building Type: Mid-Rise
- Parcel Size: 4.09 acres net; 2.72 acres gross
- Frontage Type: Porch: Projecting, Porch: Engaged, Stoop, Forecourt,, Dooryard,









PARCEL D2 - T4NF Transect

Design Criteria:

- Height: 1-2 stories (40')
- Stepbacks: Please reference Parcel A1 in SGCP for required setbacks. No step backs are required.
- Building Type: Mid-Rise
- Parcel Size: .73 acres net; 1.47 acres gross
- Frontage Type: Porch: Projecting, porch: engaged, Stoop, Forecourt, Shopfront, Gallery, Arcade, Dooryard

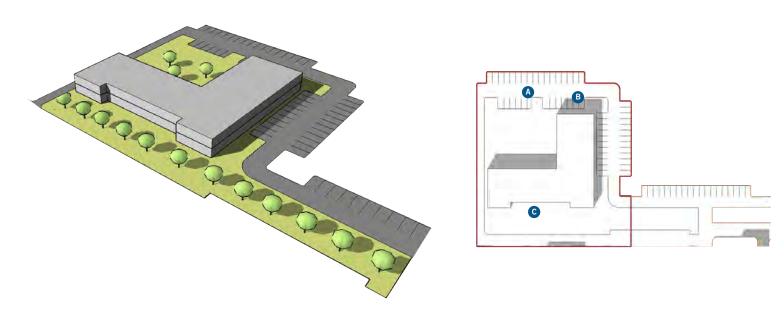


Surface parking permitted north of building

Building setback from neighborhood to the north



Building to front south edge of parcel





Building Types

New Construction

This Design Guidelines document was developed according to a 'Form-Based' approach. The entire district will consist of mixed-uses, but those locations are not specifically dictated. Rather, the SGCP allows for flexibility. However, buildings must function for specific uses, which influence and drive the design of buildings. To ensure new construction is coherent and compatible with the goals of the Sycamore Station SGCP, building typologies for new construction are outlined on the following pages in order to inform the creation of a high-quality built environment.

In general, each new building facade should be organized in three horizontal layers: base, middle, and top. The specific qualities and relationships between these layers will be particular to individual building design, and may be explicit or subtle depending on the building use, context, and overall form.









1. Housing

Multi-family housing is incorporated within the Sycamore Station SGCP to ensure a vibrant and lively urban experience throughout the day, evening, and night. A variety of scales, sizes, and ownerships shall be provided as outlines in the SGCP.



Innovative multi-family housing in Brooklyn, NYC.



Typically located on ground floors, retail should always be highly visible from the public realm and placed at areas of high activity along the main streets and public open spaces of the SGCP. The architecture of retail features large, glassy storefronts with awnings, canopies, and signage. Creative ways of allowing interior and exterior activity to blend are encouraged, such as roll-up or folding storefronts. Retail space can be designed as residential "swing space" in the early stages of the development until the need for retail matures.

3. Parking Structures

Parking must be screened from public view along primary frontages, and should be screened from all other streets and open spaces by being set behind buildings. In certain situations, non-enclosed surface parking areas will be screened from rights-of-way by landscaping or walls consistent with the architectural designs of adjacent buildings. The landscape and screening design must maintain a minimum degree of transparency and sight lines for natural surveillance and safety.

If an above-ground parking garage is exposed to a public street, the structure should be clad in such a manner so it is indistinguishable from the adjacent architecture. Elevator towers within parking garages should be designed as prominent features to mark entrances and introduce visual interest.



Bethesda Row, MD



Roosevelt Point, Phoenix, AZ

Housing Types

*Please see Sycamoe Station SGCP and City of Mesa Zoning Ordinance for specific Housing Type Technical Requirements

Mid-Rise

Medium to large-sized structure, 3-8 stories tall that may or may not incorporate structured parking. It can be used to provide a vertical mix of uses with the ground-floor commercial, service or retail uses or may be a single-use residential building where retail is not appropriate or viable. High density is its primary goal.



Main Street Mixed Use

Small to medium-sized structure, typically attached, intended to provide a vertical mix of uses with ground floor commercial (including live/work), service or residential uses. May be a single-use residential building where retail is not appropriate or viable.



Townhouse

Small to medium-sized attached structure that consists of three to eight dwelling units placed side by side. This type is typically located within medium density neighborhoods or in a location that transitions from the single family neighborhood into a neighborhood main street. This enables appropriately scaled well designed higher densities promoting walkability. Parking is typically located within each individual unit.



Housing Types

Courtyard Building

Medium to large-sized structure that consists of multiple side by side and/or stacked dwelling units accessed from courtyards. Each unit may have its own individual entry or up to three units may share an adjacent to the unit or grouped for the building.



Parking Structure Types

Single Deck Structure

Parking structures that consist of only a single deck above grade shall not be required to meet the screening requirements of a multi-level above grade garage. Spanderal panels shall be articulated to represent architectural expression. Circulation locations shall be architecturally identified. Any security fencing, grating or barriers must be architectural and integrated with the overall architectural expression. Screening shall be provided at grade at a height adequate enough to screen adjacent developments from headlights. Deck level lighting shall be at a lower height to reduce impact to adjacent developments. Suggest shaded parking canopies with lighting below.

Stand-Alone Structure

Stand-alone parking structures over 2 levels in height must include architectural screening that conceals the spandrels and openings of the garage levels. Lighting shall be designed to reduce impact to adjacent developments.

Circulation locations shall be architecturally integrated. Any security fencing, grating or barriers must be architectural and integrated with the overall architectural expression. Screening shall be provided at grade at a height adequate enough to screen adjacent developments from headlights. Deck level lighting shall be at a lower height to reduce impact to adjacent developments. Suggest shaded parking canopies with lighting below.

Liner Building-Wrapped Structure

The preferred method for screening multi-level above grade garages is wrapped or lined by occupiable space. Any exposed components of those garages must comply with the standards above and integrate with the adjacent building architecture.



An ornamental perforated metal facade screens a garage.



Screened parking structure in Phoenix, AZ.



A liner building at Georgia Tech Global Learning Center, Atlanta, GA

PAGE LEFT INTENTIONALLY BLANK

Street Level Experience

All buildings within the SGCP are encouraged to be mixed-use to create a vibrant street-level experience and promote a pedestrian-friendly community. Special attention should be given to the following street level elements of buildings in order to encourage active street life throughout the day.

- 1. BUILDING ENTRIES
- 2. RETAIL STOREFRONTS
- 3. SERVICE AND LOADING
- 4. RESIDENTIAL FRONTAGE







Building Entry

Building lobbies are encouraged to be open and transparent and become an extension of the sidewalk. Public spaces such as sitting rooms, lounges, and gyms should be located at street level. There must be a minimum 60% transparency at the ground floor level for buildings along primary frontages, and 40% on non-primary frontages.



Large, transparent entries create an inviting and visually significant lobby entrance. Prominent, sculptural canopies can be used to make the entryways visible and recognizable from distance.

Retail Storefronts

Transparency at the ground floor is encouraged to promote a sense of openness and to connect the indoor activity of the building with the exterior. Retail storefronts should incorporate display windows amounting to a minimum 60% of the surface area of the ground floor facade. This recommendation should be coordinated with transparency requirements set forth in Section 2, particularly along primary frontages. Where retail storefronts occur, the area between 3 feet and 8 feet above grade should reach a minimum of 80% transparency. To maintain accessibility, retail floors should match the grade of the sidewalk wherever possible. Store entrances should be spaced at intervals that encourage active streetscapes, not more than 60 feet apart on average.

The zone directly in front of the building should provide space for street furniture that reflects the quality and character of retail space. Roll-up storefronts, which open up to the exterior as weather permits, are permitted and encouraged throughout the district core.





Bethesda Row, MD

Residential Frontage

Residential integration is a key component of a successful Community Plan. The following components should be considered when planning building frontage.

Residential Entry - Distinctive well-lit entries to individual residences should be connected to public walkways. Patios can be included as a transitional component. Elevated or grade level entries are acceptable.

Residential Active - Interior spaces such as living rooms / kitchens are encouraged to front the public walkways to help integrate residential activity with public activity. Larger windows with privacy devices are encouraged to distinguish the interior use.

Residential Sleeping - Sleeping space are permitted along the public right of ways and walkways. Plantings or barriers (planters / pots) should be utilized in these locations to create an implied barrier from these private spaces. Smaller windows are encouraged to distinguish the interior use.

Service and Loading

The Parking, Service, & Loading Regulating Plan in the Master Plan Frameworks limits service and loading areas on or near the most important streets and public spaces within the Sycamore Station Smarth Growth Community Plan.

Ideally, back-of-house service and loading functions will be consolidated and face onto alleys or secondary streets. Regardless of exact layout or location, loading and service areas should be enclosed or screened with materials and colors that respond to the architectural language of the building(s) they serve. They should be properly secured and remain off-limits to non-authorized or public users, but should also ensure a minimum level of visibility for natural surveillance and safety as required.

Fencing, site walls, bollards and other landscape elements should be used to appropriately screen trash, loading, and service areas from the public realm. Overhead doors that face the public realm should be incorporated into the overall design of the building, with colors, materials, and fenestration patterns coordinated to fit the composition of the facade.



Service Area Screen Wall



Loading Area within Composition of Facade



Loading Bays and Parking Entry in Boston, MA



Parking Screen Wall at NY Botanical Gardens

Building Elements

Building elements are defined as the physical parts of a building that together form the architectural language of a structure. These elements indicate how a building is used and where specific functions occur. Together, these elements will not only enhance the pedestrian experience but contribute to the overall character of the urban district.

Windows

The scale and configuration of windows are used to articulate the building facade and contribute to the architectural character of the building. The size, frequency, location, and pattern of window openings will be primary visual characteristics of each building. All windows should be appropriately sized and proportioned for the building's scale and function. Mirrored and reflective glass is prohibited in all locations.

Doors

Entry doors should be proportioned to the scale of the building and the space into which they lead. They should be highly transparent and made primarily of glass, aluminum, or wood. They should be part of a larger glass 'storefront' that provides a high degree of transparency from the public realm into the common space of the lobby or entry vestibule. Storefront and door glass should not be tinted at the ground floor level. Doors into residential units are not required to meet this standard

Balconies

Balconies are exterior platforms that extend from the face of the building. They provide additional, unconditioned floor space to the building and bring some of the activity of the interior onto the exterior of the building. These outdoor living areas may be fully recessed or inset within the architecture of the building or fully projecting. The amount of projection should be proportional to the particular architecture language and scale. At all residential units, provide 32 square feet of space per unit, by balconies or common space, unless the project is within 400 linear feet along a sidewalk to a public park, trail, or plaza.

Canopies

Canopies and awnings are encouraged at entries to provide weather protection and visual interest to the public realm. They provide another layer to the streetscape and introduce variety to the facade. The canopy or awning should be a seamless extension of the buildings architectural language and style. In retail applications, canopies should project the identity of the retailer.



Laboratory and Office. Olympia, Washington



Cantilevered balconies at Residential Units add character, depth, and shadow to the facade



Residential Awning Entry becomes adds layers on interest in the streetscape

Bay Windows

Bay windows are interior platforms of conditioned space that extend from the face of the building. They may be applied for aesthetic reasons or to increase programmed interior space. These projections are often used to denote significant areas of a building, provide variation to a long facade, or to draw attention to significant corners.

Terraces

Terraces are roof surfaces that occur with vertical and horizontal changes in building mass that can be used for social activities. They often occur at the transition of a building stepback where it becomes necessary to reduce the height of a building along a street.

Penthouse and Mechanical Systems

The placement of rooftop mechanical equipment should be hidden from the street level where possible and screened from view.

Penthouses should be an extension of the building mass and facade and be thoughtful of materiality and placement on the roof. Louvers, vents, and other systems that provide exhaust and ventilation to the mechanical equipment should be architectural integrated.

Building Attached Signage

All proposed building and ground signage will be included in a future master sign plan that will dictate types and sizes.

Signage that is attached to any building should integrate with other building signage and relate to the architectural character. Logos and individual character within the sign is encouraged to contribute to the overall distinct urban character. Any illuminated or self-illuminated sign must take into consideration the adjacent uses.



Apartment Housing, South Carolina



A rooftop terrace in Boston



Mechanical equipment screened at the Penthouse Level



Building Attached Signage

Green Roofs

The benefits for the use of Green Roofs are numerous, and should be incorporated into site development whenever possible and feasible. These vegetated roof systems can provide a habitat for plants and animals in urban areas which increase the local biodiversity. They also provide additional usable open space in the city.

Urban farming and container-gardening, two forms of an extensive green roof system, can be considered on roofs where small-scale farming is desired. Although there are still some obstacles to these types of systems the potential benefits can be tremendous for a growing and emerging urban district: providing food, space for community gathering, improving education on local biodiversity, and increased education of green roofs and green roof systems. Urban farms should only be used where the correct structural system has been sized, the correct green roof system is applied, and the proper permits and liability insurance are in place.

Green Roofs can not only reduce energy costs, but can help mitigate the urban heat island effect and extend roof longevity. In addition, vegetated roofs help to reduce the volume of stormwater retention which is becoming an increasingly important issue as local regulations and codes become more stringent.

Rooftop vegetation should be coordinated with rooftop equipment and solar orientation. In all circumstances, local codes should be consulted for site-specific requirements.



Eskenazi Roof Garden, Eskenazi Health Hospital, Indianapolis



Smithsonian Institution Biology Institute



University of Delaware, Science and Engineering Lab

Materials

High-quality construction materials are required to ensure building integrity and longevity. These guidelines recommend using three or fewer primary building materials to maintain architectural clarity.

Permitted building facade materials include stucco, masonry (brick, stone, cast stone, painted concrete block), metal (zinc, steel, aluminum), concrete (panel, formed, scored, textured), tile (ceramic or terracotta), and glass (transparent, translucent, or fritted).

Wood (panels, siding, stained or painted), fiber cement (panels, siding), and other cementitious panels are permitted as facade accent materials. When used on facades that face or line public streets or publicly-accessible open spaces, these materials should be used in limited applications. Their use must not exceed 25% of total facade area on any publicly-addressing frontages.

Reflective and mirrored glass are prohibited.











Permitted Facade Materials: Metal, Glass, Masonry, Tile, & Concrete





Permitted Accent Materials: Fiber Cement & Wood



SYCAMORE STATION

miravista holdings

