

Introduction	
Objectives	71
Site Planning	
<i>A. Access & Circulation</i>	73
<i>B. Grading & Drainage</i>	75
<i>C. Safe & Adequate Access</i>	77
<i>D. Courtyards, & Employee Break Areas</i>	78
<i>E. Utility Location</i>	79
<i>F. Parking Areas</i>	80
<i>G. Loading & Service Areas</i>	83
Building Design	
<i>A. Overall Design</i>	85
<i>B. Roof Forms</i>	86
<i>C. Parapets</i>	87
<i>D. Entries, Doorways & Windows</i>	88
<i>E. Scale & Massing</i>	91
<i>F. Articulation</i>	92
<i>G. Materials & Color</i>	93
<i>H. Trash Enclosures</i>	94
<i>I. Gutters, Downspouts</i>	95
<i>J. Energy Conservation</i>	96
Landscape Design	
<i>A. Planting Areas</i>	99
<i>B. Use of Trees</i>	102
<i>C. Project Entry Landscape</i>	103
<i>D. Irrigation & Water Conservation</i>	104
<i>E. Walls & Fencing</i>	106
<i>F. Screening</i>	107
<i>G. Lighting</i>	109

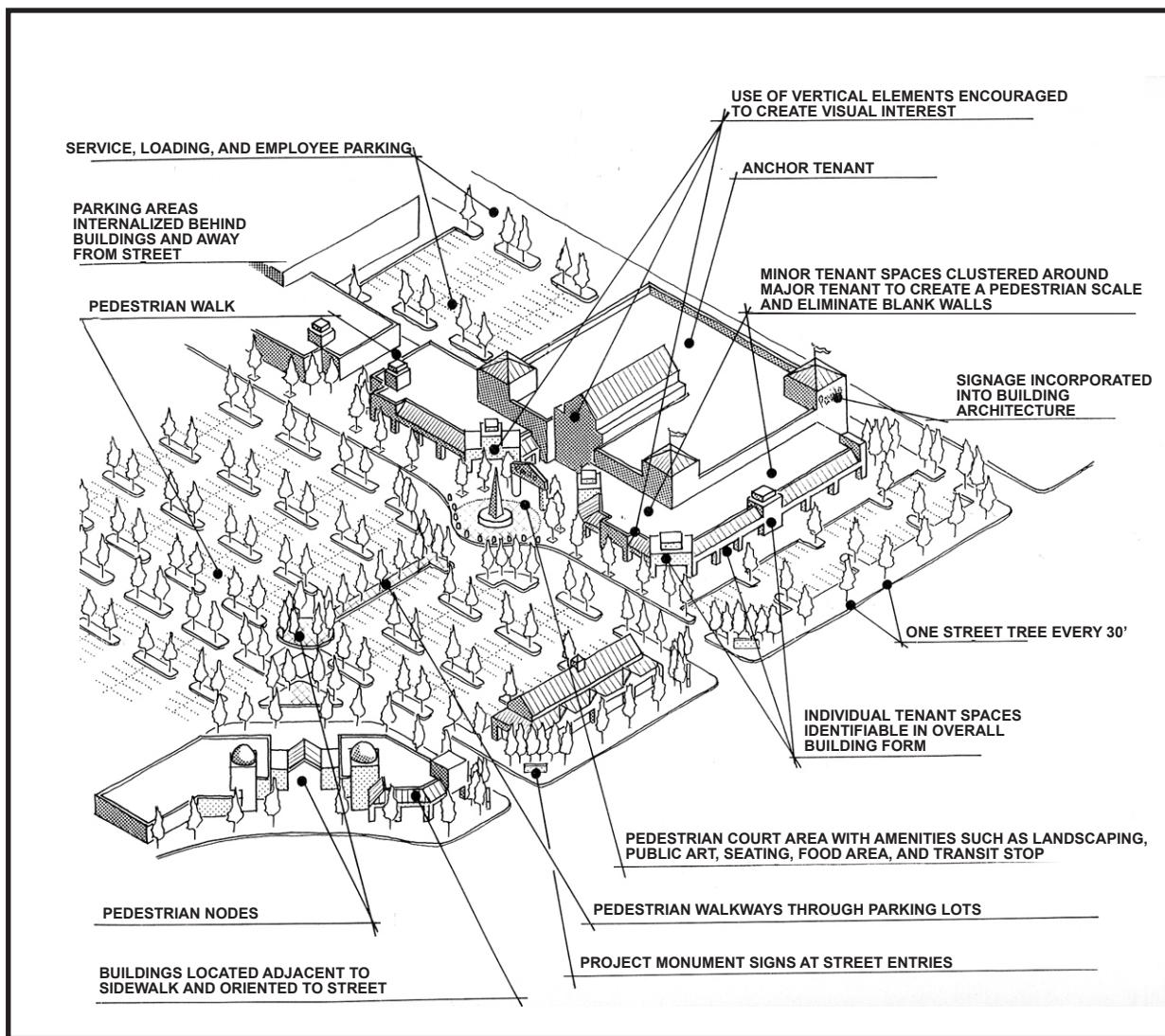
Objectives

Commercial / Industrial

These guidelines identify the fundamental attributes of commercial and industrial developments, providing guidance with respect to basic design elements and street context. Though commercial uses are not allowed in industrial zones, these guidelines may apply to both commercial and industrial developments unless otherwise noted. This chapter provides guidelines for the design of development in all areas of the City with the exception of the Downtown Specific Plan and Planned Development areas where site-specific guidelines take precedence. The provisions of this section apply to any addition, exterior remodeling, relocation or construction requiring a design permit within the City. There are additional guidelines for key gateway properties. Refer to the gateway guidelines chapter for gateway locations and guidelines.

These guidelines are intended to:

- a. Create usable and attractive streetscapes.
- b. Achieve higher design quality.
- c. Protect natural features characteristic of Morgan Hill through sensitive site planning.
- d. Create attractive, usable, and pedestrian-friendly developments.
- e. Enhance public safety.

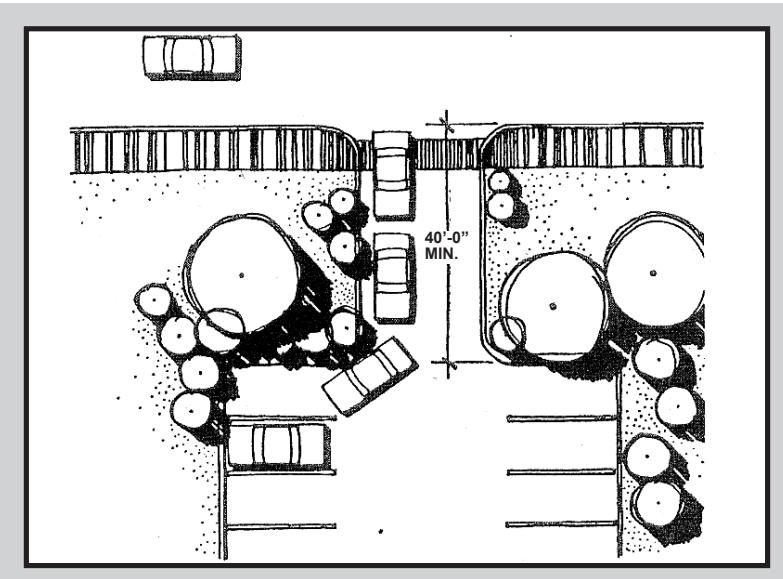


This graphic illustrates many of the desirable features identified by the guidelines and standards on the following pages.

A. Access & Circulation

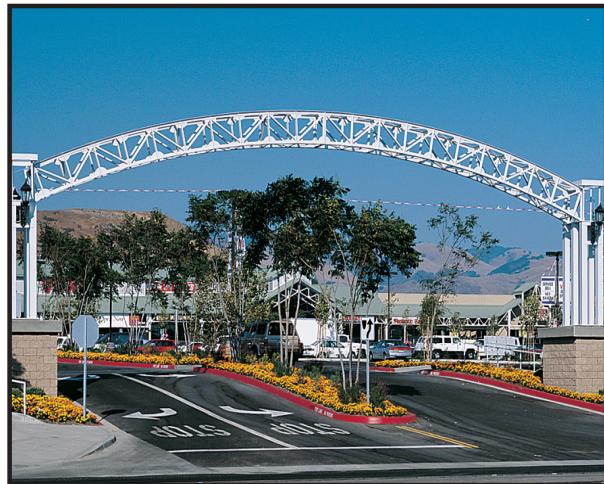
Intent: Provide safe and efficient circulation for both pedestrians and vehicles.

- A main drive aisle serving a shopping center or other commercial development should be a minimum of 30' in width.
- Reciprocal access between sites should be provided where there is opportunity.
- Drive aisles should link to or provide future access opportunities for adjacent sites.
- To eliminate problems caused by vehicles backing onto the primary circulation path, parking spaces should not be located along the main drive aisle in parking lots serving larger commercial development.
- A minimum 40' stacking distance should be provided between the edge of travel lane and first parking space. If the street has on-street parking, it can be included within the 40'. Additional stacking distance should be required when the driveway is used for access to drive-through lanes or loading dock areas used by large vehicles.
- Driveway entries should align with existing or planned median openings and adjacent driveways.
- Colored, textured, and permeable paving treatment at entry drives is encouraged.
- Where two parking angles are to be used in a single lot, they should be located in separate areas of the lot.
- Concrete curbing should be used as wheel stops where possible. The use of bumper blocks is discouraged.
- All parking stalls should be marked in an acceptable manner.
- Site plans should avoid or eliminate unnecessary driveway entrances.



A. Access & Circulation (Continued)

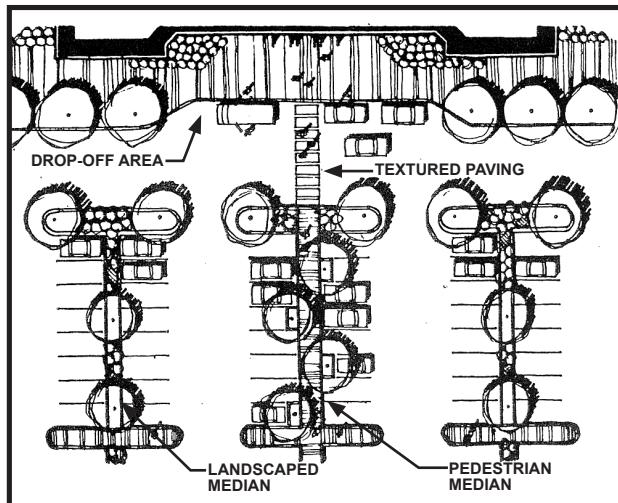
- Dead end drive aisles should be minimized.
- Commercial parking lots with 100+ stalls should incorporate an entry access feature such as:
 - a. A 7' wide landscaped median from the public street to the first bisecting parking or drive aisle; or,
 - b. A 4' wide sidewalk set within a landscape area, on at least one side of the drive aisle providing a path of travel from the street to the building.
 - c. 2' wide landscaped parkways flanking both sides of the entry drive.



Project entries should be incorporated into parking lots with more than 100 spaces.



- In large parking areas, pedestrian paths of travel within landscape islands should be provided to connect parking and building entries.
- Pedestrian drop-off areas should be a minimum of 9' wide and located outside vehicle circulation aisles and pedestrian pathways.
- Bike racks should be located near main entrances.

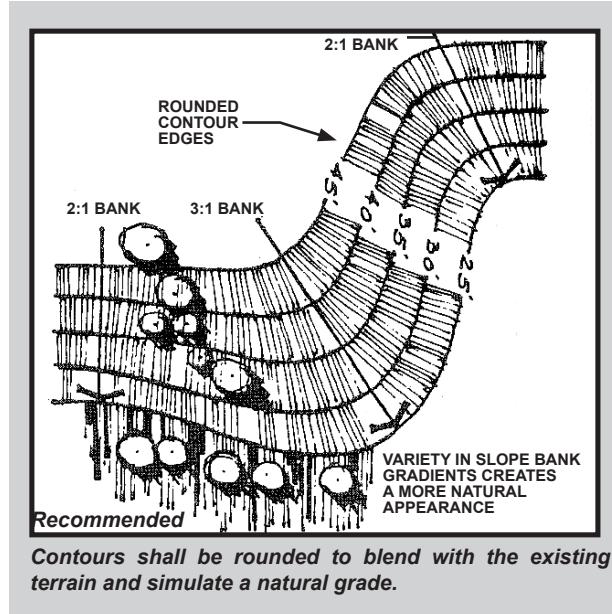


In large parking areas, pedestrian walkways, landscaped medians, and drop-off areas should be provided.

B. Grading & Drainage

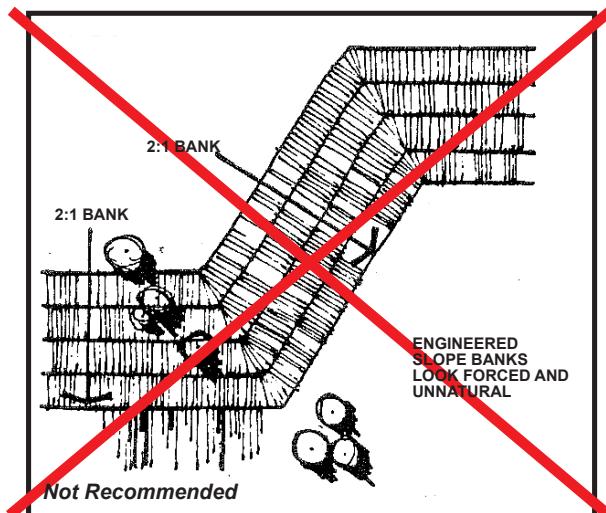
Intent: Encourage grading and drainage solutions that have a natural appearance and minimize drainage problems.

- Excess soil beyond minimum required to provide positive drainage should be off hauled.
- Generally building pad heights should be no more than 2' above natural grade.
- Excessive cut and fill should be avoided by following natural contours.
- Slopes should be rounded and contoured to blend with the existing terrain and to minimize grade differentials with adjacent streets and properties.
- Grading should retain as much natural vegetation (especially trees) as possible.
- Retaining walls that are more than 18" (measured from immediate grade) should be of concrete, masonry or masonry system.
- Concrete block walls should be textured and colored to complement building surfaces or landscaping.
- Retaining walls above 4' are discouraged.
- Storm water retention ponds should be designed as a landscape feature.
- Permanent storm-drainage facilities are generally not available,
- Projects should plan for on-site storm water detention as required by the City Engineer.
- All cuts and fills shall be at a 2:1 slope or less unless stabilized by a retaining wall or cribbing as approved by the City Engineer or Chief Building Official.



B. Grading & Drainage (Continued)

- Controlled drainage of storm water should be directed away from buildings.
- Detention ponds should not be located within the front setback.
- Any construction activity resulting in a land disturbance of one acre or more of soil, or whose projects are part of a larger common plan of development that in total disturbs more than one acre, are required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit No CAS000002 for Discharges of Storm Water Associated with Construction Activity (General Permit).
- An erosion and sediment control plan will be required prior to any physical development of property. Erosion control should be planned between October 15th and May 1st, and sediment control should be planned year round for the life of a project. Said plans should meet the minimum standards and specification of the California Storm water Quality Association (CASQA) Storm water Best Management Practice (BMP) Hand book.
- New development should incorporate open space buffers adjacent to waterways in order to protect the stream and the existing/potential natural resources and habitats contained therein. Trails, pedestrian pathways and/or bikeways should be included within the open space buffer, either as reflected in the City's Park and Bikeways Master Plan or when reasonable and appropriate.
- Development should be in substantial conformance with the User Manual of Guidelines and Standards for Land Use Near Streams, August 2006 as amended.



C. Safe & Adequate Access

Intent: Ensure safe and easily identifiable pedestrian access.

- Developments should provide easily identifiable pedestrian paths of travel as well as ADA compliant paths of travel from the street, sidewalk, parking areas, and bus stops to building entrances and key areas within the site.
- Decorative paving should be provided at crosswalks within the project as opposed to a painted stripe designation.
- Pedestrian walkways should be safe, visually attractive, and well defined by landscaping and lighting.



Accent paving at the sidewalk and crosswalk create an easily identifiable pedestrian space.



Inviting pedestrian connections and identifiable pedestrian paths are encouraged.



The pedestrian path in front of the building entrance should be a minimum of 11' deep when adjacent to head-in parking.

- In commercial developments, sidewalks at building entries should be a minimum of 11' wide where adjacent to head-in parking to allow for car bumper overhang, and 9' wide where adjacent to a landscaping buffer or drive aisle.
- State laws require that all facilities which are open to the public must be accessible to and usable by the physically handicapped. Plans for construction of new public facilities and remodeling of existing facilities should incorporate both architectural barrier removal and physical building design and parking area features insuring accessibility to the physically handicapped.



This landscaped pathway provides safe access to the entrance to the building from the parking area.

D. Courtyards, & Employee Break Areas

Intent: Encourage well designed outdoor spaces for pedestrians.

- Industrial and office developments are encouraged to provide outdoor employee break areas where appropriate.
- Employee break areas should be sheltered as much as possible from the noise and traffic of adjacent streets and other incompatible uses.
- Plazas, employee break areas and outdoor use areas should be designed to provide shade trees or shade structures, and pedestrian amenities such as benches, fountains, landscaping, and public art.



Potted plants, furnishings, umbrellas, and a fountain have been incorporated into this plaza. Developers are strongly encouraged to include pedestrian amenities within plazas and outdoor use areas within a project.



Common outdoor plaza areas should be sheltered from noise and traffic.

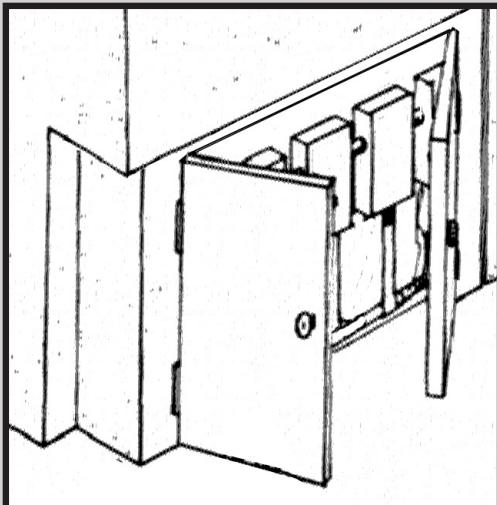


Employee break areas and outdoor use areas should be screened, sheltered from traffic and noise, and include pedestrian amenities.

E. Utility Location

Intent: Encourage well designed outdoor spaces.

- Utility and service areas should be considered early in the building design process rather than an afterthought at the construction document phase.
- Solar heating equipment and satellite dish antennas need not be screened, but must be located on the roof or in a rear or side setback area and must be as unobtrusive as possible.
- When placed within the front setback, transformers should be placed underground to maximize safety and minimize visual impacts. Where this cannot be achieved, they should be well screened and placed in the rear or side yard area.
- Mechanical equipment including gas meters, electrical meters, cable boxes, junction boxes, fire riser, and irrigation controllers should be located within a utility room, and roof access ladders should be contained within the building. Where this cannot be achieved, they should be designed as an integral part of the building on a rear or side elevation and screened from public view.



Mechanical equipment should be located within a utility room.



Transformers and other outdoor equipment should be screened from view.

- Double Detector Check Valve Assemblies (Backflow preventers) for landscape irrigation and domestic water should not be located at visually prominent locations (such as site entries) and should be well screened with shrubs, berming, or low screen walls.
- Landscaping should be used to screen above ground utility transformers, pull boxes, and termination cabinets where allowed by utility providers.



F. Parking Areas

Intent: *Minimize impacts of large expanses of parking in parking lots.*

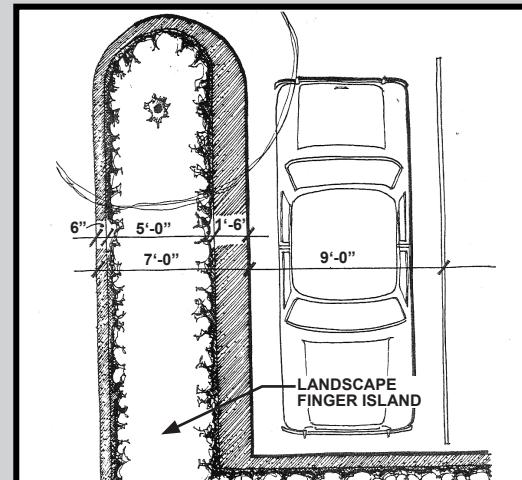
- Any parcel or portion of land used for the parking or loading of motor vehicles, or motor vehicle sales or storage, should be improved and maintained with landscaping.
- All parking areas should be graded, surfaced, drained, lighted, and parking stalls, lanes and directional guides should be marked in accordance with Municipal Code, section 18.50.
- When a parking area is located within a commercial or industrial district there should be a landscaped area at least 15' in width between the parking area and the public right-of-way or private street.
- When a parking area is located adjacent to an arterial street, there should be a landscaped area at least 30' in width between the parking area and the public right-of-way.
- Where a parking area is across the street from a residential district, or adjoins a residential district on the same side of the street, there should be a landscaped area 25' wide between the parking area and the front property line.
- The use of interlocking pavers is encouraged in place of stamped concrete in parking areas.
- Differentiated paving should be used to accent pedestrian travel areas.



- The interior of any parking area should be landscaped, with planter areas measuring a minimum 5' in width, minimum inside dimension, at both ends of each row of spaces, with the planter area length to be equal to adjoining parking spaces.
- There should be an additional planter area adjoining each tenth parking space in each row of parking spaces, except that when there are more than fourteen and less than twenty spaces, the additional planter should be centered in the row.
- Where front-to-front parking spaces are provided, required planter areas shall be aligned to form a continuous planter area.
- Landscaped finger islands should be provided one per every ten spaces. (See illustration above)
- When a long driveway having only a single ingress is necessary within a development, provisions should be made for the maneuvering of emergency vehicles, and the arrangement approved by city staff prior to its incorporation into the site plan.

F. Parking Areas (continued)

- All end parking stalls should be adjacent to landscape planters. The landscape planter should contain a 12" strip extension (created as an integral pour) of concrete inside the 6" curb of the planter, to create an 18" concrete strip for a person to step on when getting into or out of a vehicle. The concrete strip should be attached to the 6" curb. This should not reduce the minimum inside dimension of the 5' wide landscape planter.
- Where a parking lot adjoins a residential district, it should be separated there from by a solid masonry wall not less than 5' nor more than 6' in height, provided the wall should not exceed 3' in height where it abuts the front yard area of an abutting residential district.
- In addition to the required front setback and perimeter planting areas, a minimum of 10% of each parking area must be landscaped.
- Minimize dead end drive aisles.
- Dead end ninety-degree parking should be provided with adequate turning room. The turn-around area may encroach into landscape areas, provided that a landscaped strip of a minimum width of 2'-6" is provided between the paved area (including curb width) and the property line.

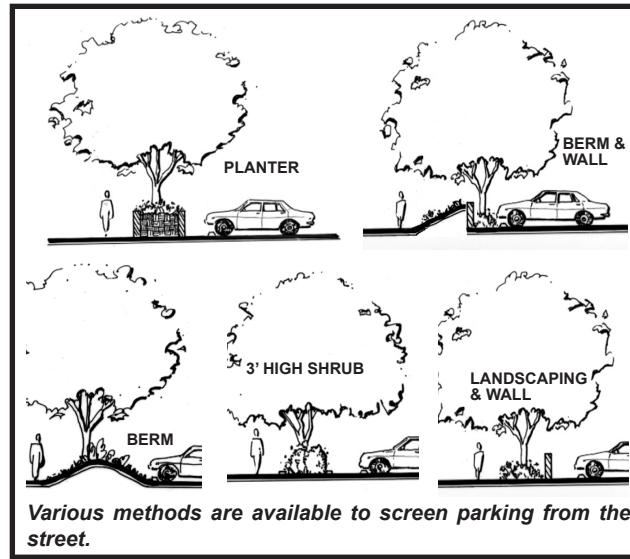


Landscape islands shall be provided within parking lots and shall have a minimum inside dimension of 5'.

- Any parking layout necessitating a cul-de-sac or similar type of turning facility for reversing direction of travel in order to exit from the area or any parking spaces will be generally discouraged.
- 30% of parking may be designated as compact car parking.
- A 2' vehicle overhang can be counted toward the required parking stall length when the 2' overhang is within a minimum 5' wide landscape area or overhangs a minimum 6' wide sidewalk/walkway.
- Landscaping within parking areas should be protected from encroaching vehicles by 6" concrete curbing or raised planting areas.

F. Parking Areas

- Parking lots adjacent to and visible from public streets should be adequately screened from street through one or more of the following:
 - a. rolling earth berms (2:1 slope maximum)
 - b. low screen walls
 - c. changes in elevation
 - d. landscaping
- Screening should minimize view of parking lots while allowing public & police surveillance for safety. Effective screening is generally 3-4' in height.

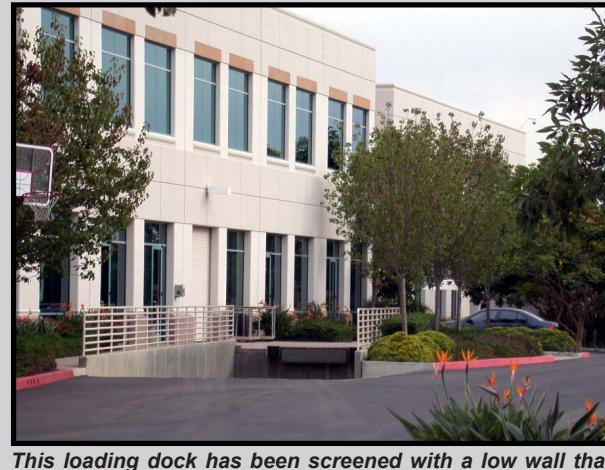
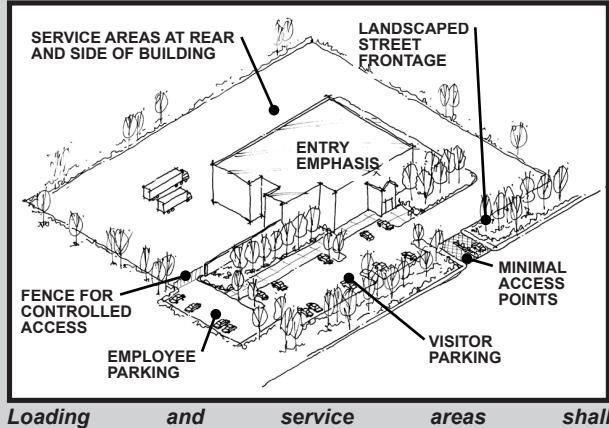


- Parking areas and cars should not be the dominant visual element of the site or streetscape.
- Large projects should break up parking areas into a series of smaller parking areas, interrupted by landscaping. This guideline is in addition to the required landscape fingers.
- Large expanses of paved areas and long rows of parking spaces should be avoided.
- Where parking lots and drive aisles abut buildings, a landscape strip (minimum width of 6') should be provided between a building and parking/paved areas visible from public street. Where entries, plazas, and arcades are adjacent to the parking/paved area, no landscape strip is required.
- Parking lots on corner sites should not be located near the intersection. It is preferred that buildings be placed close to the required setback from street, with landscaping between building and street and parking located behind building.

G. Loading & Service Areas

Intent: Minimize visual impacts and conflicts with loading and service areas.

- Commercial and industrial complexes with security gates should provide an adequate on-site turn-around area so that maneuvering in the public right-of-way is not necessary.
- Loading, storage, and service facilities should be screened from view. If loading dock is visible from public view, a wide landscaped buffer, wall or other method of screening shall be provided.
- Loading facilities should be designed as an integral part of the building which they serve and should be located in the most inconspicuous location.
- No loading facility, including incidental parking and maneuvering areas, should extend into any required minimum setback area when adjacent to a street.



This loading dock has been screened with a low wall that complements the architecture of the industrial building.

- Service and loading areas should be located and designed for easy access by service vehicles; for convenient access by each tenant; and to minimize circulation conflicts with other site uses.
- Truck loading and material handling should be accommodated on-site in designated areas .
- Visitor and employee parking should be separated from loading and service areas.



The trellis and screen wall enhance this loading area.

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A. Overall Design

Intent: Encourage quality design with authentic architectural styles and details.

- Project design should be consistent with surrounding development and the character of the community.
- Project designs should provide authentic representations of architectural styles and details.
- The use of corporate “chain” architecture is discouraged unless design is consistent with the desired scale and character of community. Corporate tenants should design their buildings to fit the scale and character of the community.



Exposed wood beams and rafter tails, tile roofing, and recessed window planes accentuate the Spanish style architecture of this building.



RECOMMENDED - This building does not represent typical corporate styles and consequently blends better with the character of the community.



NOT RECOMMENDED - This building represents typical corporate style.

- If working with or around a historic structure, refer to the city's Cultural Resources Preservation ordinance contained in Chapter 18.75 of the Municipal Code.
- Buildings within commercial centers or campus style industrial parks should be designed to complement one another. This may include the common use of roofing material, roof pitch, exterior finish material, and consistent color palettes.



Buildings within this industrial project create a campus-like setting with similar architecture employed on each of the buildings.

B. Roof Forms

Intent: Encourage roof forms that will add interest to the street scene and minimize impact of large structures.

- Buildings with flat or low-pitched roofs shall incorporate architectural elements to break up long horizontal rooflines.
- Rooflines should be designed to create architectural interest and to “break” large structures into smaller perceived scales. Roofs should incorporate a maximum of two varying roof types (e.g., hip, gable), or a minimum of two varying roof heights for flat roofed structures.
- Roof lines should be designed to screen roof mounted mechanical equipment. All screening should be constructed consistent with the materials of the building and shall be designed as a continuous component.



Multiple roof forms and changes in the wall planes makes this structure appear more like a number of smaller buildings.

- Variation in roof form is encouraged to create interest, lessen the mass of the building, and add visual appeal.
- Deep roof overhangs are encouraged to create shadow and add depth to facades.



C. Parapets

Intent: Provide direction for well detailed parapets.

- If the interior side of a parapet is visible from pedestrian view, it should be finished with the same materials and a similar level of detail as the exterior side.
- Parapets should be designed to screen mechanical equipment without requiring the use of an additional roof screen. Height and method of screening should be clearly defined.
- If additional roof screening is required, the design of the roof screen should be architecturally compatible with its building.



This cornice provides a proportionate finishing cap to this parapet.



Different parapet heights and treatment creates the image of several smaller individual buildings and reduces the massing of the buildings.

- Parapets should include one or more of the following detail treatments: continuous banding or projecting cornices, dentils, caps, corner details, or variety in pitch.
- Parapets should not appear “tacked on” and should convey a sense of permanence.



The walls of this parapet are returned, making it appear as a substantial component and not as a “tacked on” element.

D. Entries, Doorways & Windows

Intent: Encourage quality architecture with well articulated entries, doorways, and windows.

- Commercial and industrial buildings should include a primary entry that provides protection from the weather.
- Building entrances should be emphasized using lighting, landscaping, and architecture.
- To minimize cigarette butt disposal, ash receptacles should be located at entries of buildings with high traffic uses such as libraries, book stores, restaurants and movie theaters.
- Roll-up doors are discouraged where visible from public right-of-way; however, where they occur they should be recessed into the building to provide a shadow line.



Awnings and elevated roof forms create an easily identifiable entry and the awnings and trellis system act as solar shading devices.

- Service and roll-up doors should be painted to match the building or trim. Steel corners should be installed to protect the building from damage by vehicles in lieu of bollards.
- The use of colored, textured, and permeable paving treatment at entry drives is encouraged to accentuate these areas.



Vertical shading devices have been incorporated into the window design on this industrial building.

D. Entries, Doorways & Windows (Continued)



Variations in wall planes, additional glazing, unique window treatments, and projecting elements enhance these industrial building entries.

Building Design



Each storefront has its own distinguishable entry.

Use of different materials and building forms accentuates this entry.

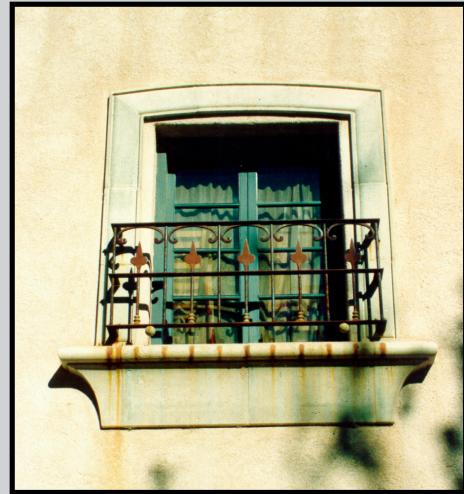
- Well-designed storefronts, including windows, doors, wall composition, colors, and materials are very important to create a sense of entry and pedestrian scale. It is important that the main entrance to a building is clearly identifiable and unique as it is the primary point of arrival. Entry design should incorporate two or more of the following methods:
 - a. Change in wall / window plane.
 - b. Placement of art or decorative detailing.
 - c. A projecting element above the entrance.
 - d. A change in material or detailing.
 - e. Implementation of architectural elements such as flanked columns or decorative fixtures.
 - f. Recessed doors, archways, or cased openings.
 - g. A portico or formal porch either projecting from or set into the surface.
 - h. Changes in the roofline, a tower, or in the surface to a wall.

D. Entries, Doorways & Windows (Continued)

- Upper floor entries at the street frontage should have a distinct design that complements the main building frontage.
- Stairways should be designed as an integral part of the overall architecture of the building. Stairways should complement the building's mass and form.
- Doors and windows should be enhanced by the use of accent trim.



The stairwell on this building is designed as an integral part of the overall architecture.



Example of a window enhanced with accent trim and a projecting sill.

- Window type, material, shape, and proportion should complement the architectural style of the building.
- Where appropriate to the architectural style, windows should be inset from building walls to create shade and shadow detail. The minimum inset should be 3".



Building form accentuates entry

E. Scale & Massing

Intent: Minimize apparent scale of large structures.

- Large buildings are strongly encouraged to utilize one or more of the following in order to reduce their perceived height and bulk:
 - a. A change of roof or wall plane;
 - b. A change in massing;
 - c. Projecting or recessed elements;
 - d. Varying cornice or roof lines;
- Scale and proportions should be in keeping with the architectural style of the building and type of use.



Varied roof forms, building insets and projections, columns, and facade treatment create interesting shadow patterns and contribute to this building's character.



Variation in rooflines, changes in wall planes, and recessed and projecting elements reduce building massing into smaller scale components.



The second floor porch provides a horizontal division within the tall facade, thus reducing its scale.

- Surface detailing, such as score lines, should not serve as a substitute for distinctive massing.
- Where feasible, minimize the visual impact of large monolithic structures by creating a cluster of smaller buildings or the appearance of a series of smaller attached buildings.
- Tall or large structures should emphasize horizontal planes through the use of trim, awnings, eaves, other ornamentation, or a combination of complementary colors.



Extending eaves and multiple building forms reduce the scale and massing of the building.

F. Articulation

Intent: Ensure quality commercial and industrial developments that are well articulated on all sides.

- The highest level of articulation should occur on the front façade and facades visible from public streets; and similar and complementary massing, materials, and details are to be incorporated into other building elevations.
- Architectural elements such as overhangs, trellises, projections, awnings, insets, material, texture and color should be used to create a human scale at the pedestrian level on a building.



This store design utilized a variety of architectural elements to create an interesting, varied frontage for a large building.



Inset arches provide visual relief to an otherwise blank wall of this side elevation.

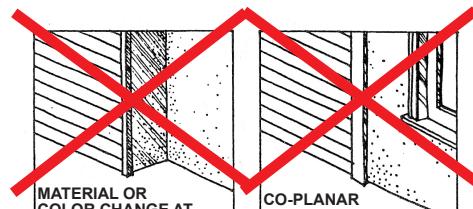
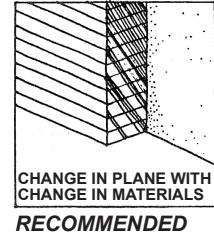


An arcade on the first floor creates a human scale at the pedestrian level and reduces the overall massing of a building.

G. Materials & Color

Intent: Provide direction for appropriate use of materials and colors to create higher quality developments.

- Material changes should occur at intersecting planes or at other logical locations, preferably at inside corners of changing wall planes or where architectural elements intersect such as a pilaster and projection.
- Materials and colors should be used to enhance different parts of a building's façade where appropriate to the architectural style.
- Materials and textures should vary between the base and body of a building to break up large wall planes and add visual base to the building.



Material changes should occur at inside corners in order to appear more substantial and integral to the design of the elevation.



Variation in materials and colors enhance different parts of this building's facade.

- Materials, textures and colors should be used to enhance different parts of a building's façade. Heavier materials should be used lower on the building elevation to form the building base.
- Contrasting but complimentary colors should be used for trim, windows, doors and key architectural elements.

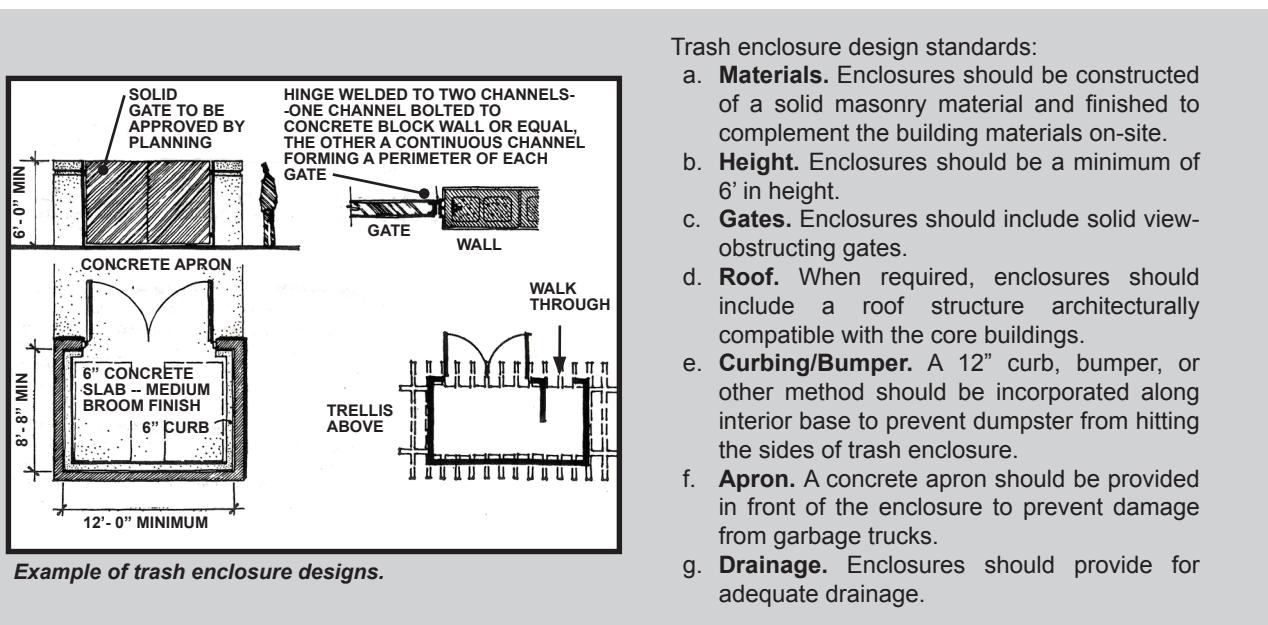


Stone base and terra cotta roof tiles, and colorful awnings contribute to the unique character of this building.

H. Trash and Recyclable Enclosures

Intent: Provide direction for effective design and minimize visual impact of trash enclosures.

- Enclosures should be located away from adjacent residential uses to minimize nuisances to neighboring properties.
- Enclosures should be separated from adjacent parking stalls with a minimum 3' wide planter and a 12" wide paved surface behind the curb (consistent with planter island standards). This will ensure adequate space is available for passengers to access their vehicle.
- Trash/recycling containers should be screened using landscaping and enclosures designed consistent with the development. Trash/recycling enclosures should be a minimum of 12' wide x 8'-8" deep and are also required to be screened with landscape materials. Refer to recycling ordinance for additional requirements.
- Chain link fencing and gates with wood slats should not be used.
- Enclosures should not be visible from primary entry drives.
- Enclosures for restaurant uses should be sized to accommodate tallow drum.



Example of trash enclosure designs.

Trash enclosure design standards:

- Materials.** Enclosures should be constructed of a solid masonry material and finished to complement the building materials on-site.
- Height.** Enclosures should be a minimum of 6' in height.
- Gates.** Enclosures should include solid view-obstructing gates.
- Roof.** When required, enclosures should include a roof structure architecturally compatible with the core buildings.
- Curbing/Bumper.** A 12" curb, bumper, or other method should be incorporated along interior base to prevent dumpster from hitting the sides of trash enclosure.
- Apron.** A concrete apron should be provided in front of the enclosure to prevent damage from garbage trucks.
- Drainage.** Enclosures should provide for adequate drainage.

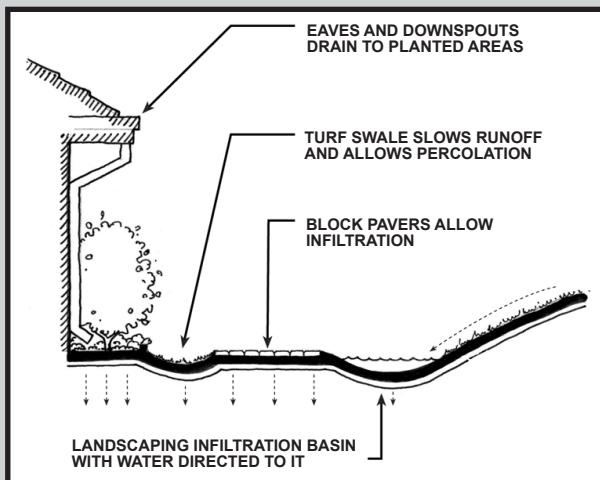


Materials used on this trash enclosure complement the architecture of the building.

I. Gutters & Downspouts

Intent: Provide design direction for functional building elements.

- On buildings designed with parapet walls on a street frontage, gutters and downspouts should be concealed inside the wall.
- Gutters and downspouts should be painted to match the surface to which attached, unless used as a design element, in which case the color is to be consistent with the color scheme of the building.
- Discharge from gutters and downspouts should not flow directly across pedestrian walkways. Water should be directed to permeable areas for percolation or discharges into a project drainage system. The use of splashblocks is discouraged.



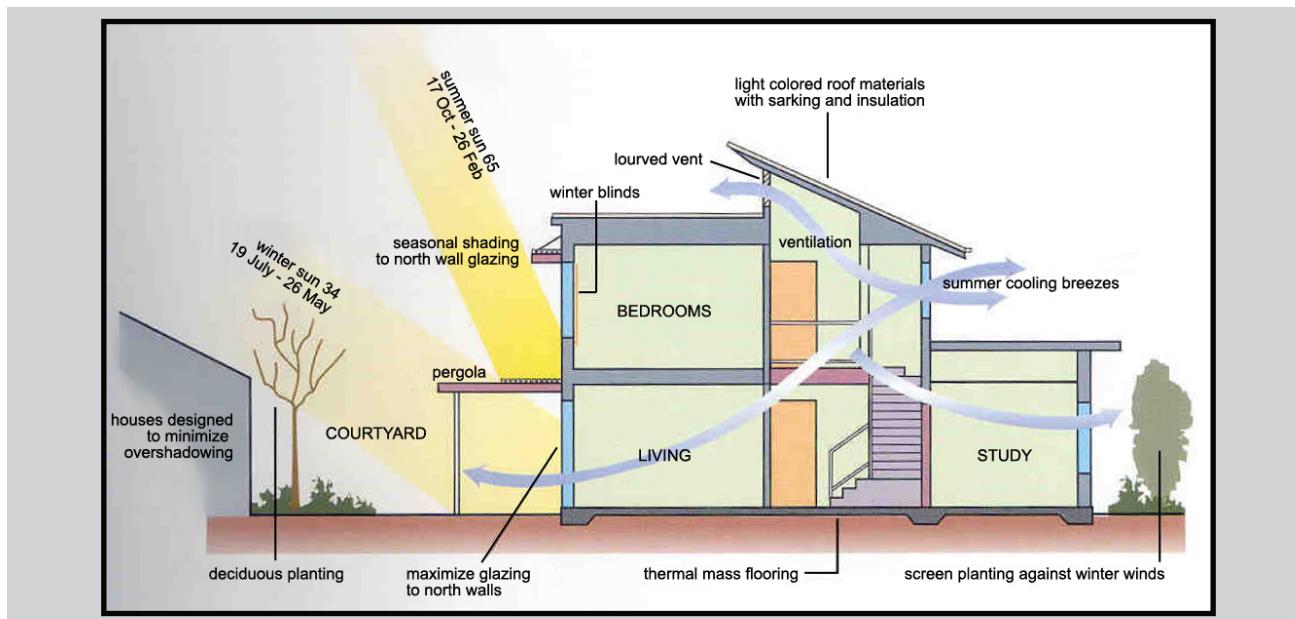
- Gutters and downspouts should be decorative, and should not appear as a "tacked on" afterthought.
- Discharge that ties into a project's drainage system is preferred; however, concealed.
- Non-decorative externally mounted gutters and downspouts should be avoided on elevations facing an arterial street.

J. Energy Conservation

Intent: Conservation of energy through lot layout, building design and construction techniques. Refer to the "Build it Green" check list.

Heating and Cooling

- Buildings should be designed to minimize mechanical heating and cooling. Sunlight should be used for direct heating and illumination wherever possible.
- Natural ventilation and shading should be used to cool a building. Active and passive solar heating is encouraged.
- The use of two separately zoned high-efficiency heating systems in units over 3000 square feet, is encouraged. The heating systems must be high efficiency gas furnaces with 90% efficiency rating or greater.
- Units that utilize alternate energy sources, such as solar hot water, alternative power generation, solar space heating or other energy saving methods are highly encouraged.



- EPA "Energy Star" labeled windows with low e-coatings should be utilized.
- All new construction is encouraged to use energy-efficient features such as tight construction and tightly sealed ducts; energy-saving windows; improved insulation; super efficient heating and air conditioning systems. (Installation of a HERS (Home Energy Rating System) certified heating and air conditioning (HVAC) system with all duct work tested and certified to achieve a minimum 3% savings in the energy budget).
- Light exterior roof colors should be used to reflect the sun's heat.
- Buildings should be designed to minimize mechanical heating and cooling. Sunlight should be used for direct heating and illumination wherever possible. Natural ventilation and shading should be used to cool a building. Active and passive solar heating is encouraged.

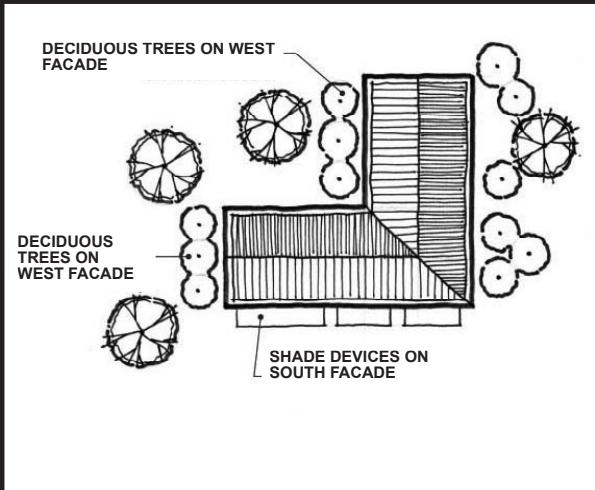
J. Energy Conservation

Water Conservation

- Water conservation is encouraged through innovative building techniques that result in reduced water waste, and which exceed current city and state standards. For example, re-circulating hot water system with demand pumping, or other water saving plumbing systems or features are highly encouraged.

Electrical

- All buildings are encouraged to have alternative energy sources and power generation providing for at least 50% of the building's electricity requirement.
- Low-voltage / high efficiency lighting should be used in the landscape whenever possible.
- Incorporate timers and sensors to avoid unnecessary lighting.
- Renewable energy sources are encouraged for indoor lighting including roof monitors, skylights, or light wells for day lighting upper floors.



Deciduous trees and shading devices should be used to provide summer shade and allow solar access during winter months.



Water efficient landscaping is encouraged.

- Windows should be located to maximize day lighting and reduce the need for indoor lighting.
- Renewable energy sources are encouraged for indoor lighting, including roof monitors, skylights, or light wells for day lighting upper floors.

Construction Site

- Scrap dry wall, wood waste, and cardboard should be source separated and recycled.
- Use low to zero emission volatile organic compounds (VOC) and adhesives if possible.
- Use certified Forest Stewardship Council (FSC) plywood.
- Use building insulation with minimum 25% recycled content.

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A. Planting Areas

Intent: Encourage the use of planting and hardscape to embellish property.

- Landscaping should be used to:
 - a) Define areas such as building entrances, key activity hubs, focal points, and the street edge;
 - b) Provide screening for unattractive / unsightly service areas; and
 - c) Serve as buffers between neighboring uses.
- Landscaped yards and areas should be provided and maintained at the time a main building is constructed and occupied by any use requiring a building, or when any open use other than agricultural occurs on the property.
- The Community Development Director may authorize a delay in the installation of required landscaping or a required deposit because of water shortages or any other extreme weather condition.



Trees planted within this parking lot help create an attractive parking environment.

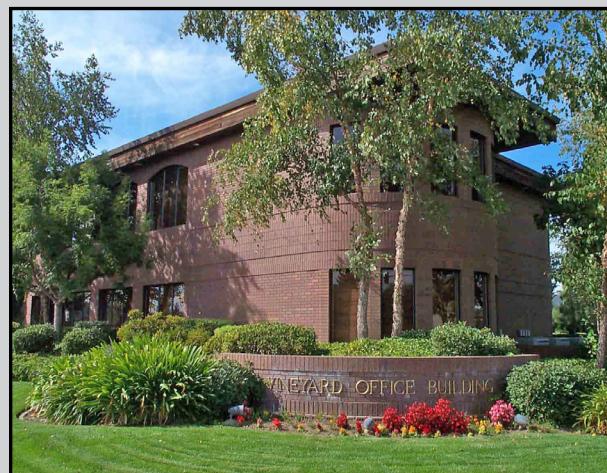
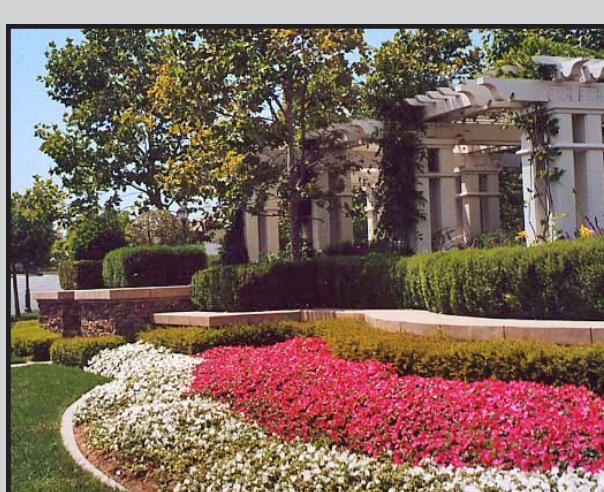


A combination of planting materials enhances this landscaped area.

- All unpaved areas should be landscaped with ground cover and/or shrub plant material, and undeveloped areas proposed for future expansion should be landscaped with appropriate ornamentals, to include ground cover, shrubs and/or trees.
- All open parking areas should be landscaped except those areas specifically used for vehicle maneuvering and parking. Landscaping should include trees, shrubbery and ground cover or other approved hardscape materials. All such landscape areas should be provided with automatic sprinkler systems.
- A minimum 5' wide planted parkway should be provided on arterial streets between the street and sidewalk. Parkways should be planted with shade trees that are consistent with the City's Street Tree program to provide a more pleasant pedestrian environment and contribute to streetscape continuity. Street trees should also be planted in the landscape area between the sidewalk and any adjacent wall/fence.

A. **Planting Areas (Continued)**

- Where parking areas and drive aisles directly abut a building, a landscape strip (minimum width of 4') should be provided between the building and parking/paved areas visible from public street and/or between the fences and property lines which are visible from the public street. Where entries, plazas, and arcades are adjacent to the parking/paved area, no landscape strip is required.
- Landscaping must be provided in at least ten percent of the gross area of parking lots. Insofar as possible, this should be in borders and standard traffic islands.
- The minimum number of trees to be provided in any parking area should be one for each four parking stalls.
- Landscape planters should be provided at both ends of a row of spaces with the planter area length equal to the adjoining parking spaces.



Examples of flowering vegetation used as a focal point (left) or accent (right).

- Plant selections should be in accordance with Chapter 18.73 Water Conserving Landscapes.
- Planting palettes should use a variety of height, textures, and colors.
- A combination of trees, shrubs, and ground cover should be incorporated into landscaping plans. Minimum sizes are as follows.
 - a) Trees: 15-gallon.
 - b) Shrubs: 5-gallon
- Larger/older trees should be strategically planted to assist new development in looking "established" as quickly as possible.
- Finishing treatment may be provided as an alternative to ground cover.

A. Planting Areas (Continued)

- Trees and shrubs should be located and spaced to allow for mature and long-term growth. Trees and shrub types should be selected to minimize root problems.
- Walkways should be provided through landscaped areas along paths of likely travel to protect landscaping from foot traffic.
- Landscape planting should provide an effective contribution to crime prevention. Shrubs that create hiding places should not be placed in areas of pedestrian movement such as along walkways and building entrances.
- Murals, trellises, vines and/or espaliers should be placed on large expanses of walls at the rear or sides of buildings to break up building mass and create visual interest.
- Planting areas should be designed to capture storm water through swales and dry wells.



Accent planting in key areas.



Potted plan can also be used to add interest.



Vines enhance entry and provide shade.

B. Use of Trees

Intent: Encourage canopy trees in developments.

- Canopy trees should be strategically used in parking areas to reduce the impact of large expanses of paving and provide shade, as well as reduce glare and heat build up.
- Trees located around the perimeter should have a 30' to 40' canopy potential and be sized at 24" box or larger at time of installation.
- Top pruning should not be used to clip plants and trees.
- The use of native oaks is strongly encouraged.

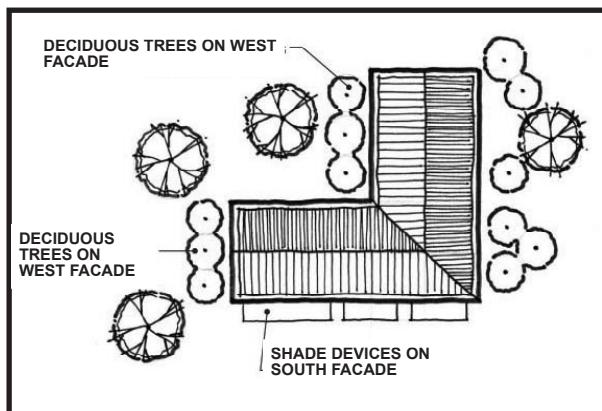


Trees used in parking lots provide shade and visual enhancement, as well as reduce glare and heat build up.



Trees can be used to soften blank walls, provide visual screening and shade, and frame views.

- A balance of deciduous and non deciduous trees should be provided of the trees should be provided.
- Evergreen trees should be used to soften the appearance of blank walls and provide visual screening, but should not be a replacement for enhanced architecture.
- Deciduous trees should be used to provide solar control during summer and winter, provide fall color, seasonal flower, and other desired effects.
- Flowering trees should be used to provide color and accent entrances.



C. Project Entry Landscape

Intent: Encourage well thought out project entries.

- A combination of the following accent features should be incorporated into the project entry:
 - a. Standard ornamental landscaping
 - b. Landscaped medians
 - c. Water features
 - d. Architectural monuments
 - e. Decorative walls
 - f. Enhanced paving.
- Project entry features should reflect the overall architectural identity or character of the development.



Use of specialty paving and large planters direct the eye and pedestrian travel to the building entry.

Landscape Design



The industrial building entry is strengthened by the arrangement and use of flowering plants, fountain, and decorative walls.

- Project icons, thematic pilasters, special paving treatment, water fountains, and specialty landscaping should be used to unify a project.
- Bike racks should be located near main entrances.



Flowering vegetation on a round-about and special paving treatment distinguish this project entry.

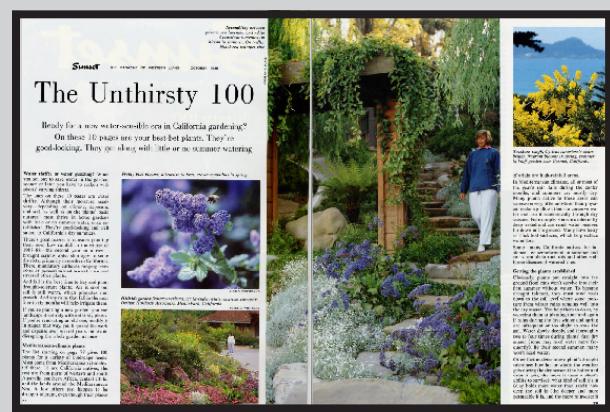
D. Irrigation & Water Conservation

Intent: Promote water conserving planting design.

- All landscape areas should have automatic irrigation systems installed to ensure plant material survives.
- Irrigation systems should be designed to prevent overspray onto walkways, parking areas, buildings, and fences.
- Water conservation techniques should be incorporated into all landscape plans in accordance with Chapter 18.73 Water Conserving Landscapes. Examples of these techniques include automatic controller, drip irrigation, or matched precipitation rate sprinkler heads.
- Landscaping planted directly below the eaves or at a rain gutter outlet should be sturdy and have a subsurface matrix of roots to tolerate heavy sheet flow and periodic saturation.
- Plants should be grouped in high and low maintenance hydrozones and coordinated with irrigation plan to minimize use of water and the laying of irrigation tubing.



Example of native plant grouping that requires little water.



Sunset Magazine's guide for water conservation.

- Irrigation systems should be designed to apply water slowly to allow plants to be deep watered and reduce runoff. Drip systems should be used in all areas except turf irrigation and small ornamental planting.
- Landscape designers are encouraged to refer to "Water-Conserving Plants Landscapes for the Bay Area," published by the East Bay Municipal Utility District for a listing of water conserving trees, shrubs, and groundcovers. Other publications include "Success List of Water Conserving Plants and Select California Natives" published by the Saratoga Horticulture Foundation, and Sunset Magazine's "The Unthirsty 100," and "Trees and Shrubs for Dry California Landscapes" by Bob Perry.
- Use of indigenous and water wise plants in conjunction with an efficient water system, such as drip irrigation, is strongly recommended.

D. Irrigation & Water Conservation (continued)

- Provide root barriers or structural soil when trees are planted 5' or closer to any hardscape element (including curbs, sidewalks, or any other paving) or building. The distance should be measured from center of tree trunk to edge of nearest hardscape or building.
- Sprinkler heads should be “pop-up” style.

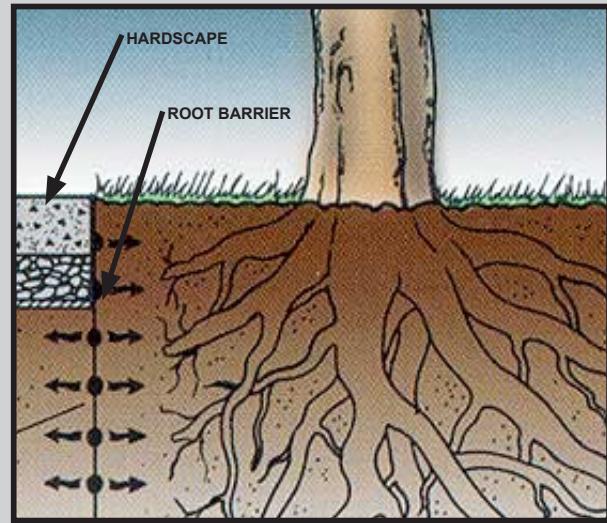


Pop-up sprinkler.

Landscape Design



Example of damage created from a lack of a root barrier.



Root Barriers prevent cracking.

E. Walls & Fencing

Intent: *Minimize impact of walls along streets.*

- Sound walls located along public streets should be offset with an average setback of at least 20' and a minimum setback of 15', as measured from the face of curb. Offsets in the wall should be a minimum of 5' deep every 50' to 75', depending on the length of the wall.
- All fences and walls required for screening purposes should be of solid material.
- Chain link or similar metal wire fencing with wood slats is strongly discouraged for screening purposes in commercial or light industrial areas, but may be considered for use in heavy industrial areas.
- Fences and walls should be constructed as low as possible (maximum 8') while still performing their screening, noise attenuation, and security functions.
- Fences and walls should be designed to complement project architecture.



A low rock wall makes a nice buffer between uses and provides attractive screening.



The height and length of this wall are relieved by rhythmic columns and arches as well as the use of landscaping.

- Walls on sloping terrain should be stepped to follow the terrain.
- To bring continuity to the overall street scene, similar elements such as columns, materials, and cap details should be incorporated on perimeter walls that transition from one development to another.
- Fences and walls should be finished and designed to complement project architecture and planted with vines, shrubs, and trees.

F. Screening

Intent: Encourage effective screening solutions.

- Any outdoor equipment on a roof, side of a structure, or on the ground should be screened from view.
- Screening should be architecturally integrated into the structure in terms of materials, color, shape, and size.
- Service areas should be screened with portions of the building, architectural wing walls, or landscape planting.
- A minimum 15' of landscaped setback should be provided for parking lots adjacent to the street edge. Screening in such setbacks should include one or more of the following:
 - a. landscaped rolling earth berms (2:1 slope maximum)
 - b. low screen walls
 - c. changes in elevation
 - d. landscaping



An example of landscaping used to screen this utility box.



This drive-thru is screened with a combination of a low masonry wall and landscaping.

- All outdoor storage for goods, materials, commercial vehicles or equipment should be visually screened as appropriate.
- All areas utilized for parking, storage or loading should be screened, modulated or integrated from view of access streets, freeways, or adjacent properties. This may be accomplished by employing one or all of the following techniques:
 1. Trees should be planted adjacent to structures on-site, one tree for each thirty linear feet of the combined length of the rear and both side wall dimensions of the structure. Minimum size should be 15-gallon.
 2. Major-scale trees may be linear or en masse. This method requires use of trees that will ultimately provide foliage that is visible above the roofline from within the total site.
 3. Linear or group masses of small-scale trees; this method requires use of trees that will ultimately provide foliage or shade pattern on either horizontal or vertical planes.
- Landscaping, when used as a screening device, should be of a type which provides a year-round barrier, and should be of trees and shrubs spaced so that any view of objects on the opposite side is effectively eliminated.
- A combination of elements including solid masonry walls, berms, and landscaping should be used to screen objects at the ground plane.

F. Screening (continued)

Landscape Design

- A fence or wall, when used as a screening device, should be of solid wood or masonry so constructed as to effectively eliminate any view of objects on the opposite side below the maximum height of the required fence or wall; if a grill is installed, it may be built with a uniform screen or with an openwork design. Fences and walls should be landscaped and modulated to provide visual relief to continuous wall or fence surfaces.
- Propane or any other type of above ground tank or equipment should be located in an area which should minimize their visual impact as viewed from the public right of way and should be screened or otherwise treated so as to be compatible with other structures on the site. Compressors or any external equipment shall be screened by a wall, a fence or landscape materials, and be located below the fascia and/or roofline of the buildings. Further, they should be located on the rear or hidden side of the building and should be painted to match the surface to which attached, if the surface is visible.



Landscaping, walls and trellises can be used for screening.

- Where walls are used to screen parking, breaks should be provided to allow pedestrian circulation.
- Vines and espaliers should be used to visually soften walls and fences used for screening.

G. Lighting

Intent: Encourage appropriate lighting that will minimize glare issues, yet improve safety.

- All lighting, including security lighting, should be shielded to minimize glare upon neighboring property and public rights-of-way in compliance with Sections 15.40.310 and 15.40-420 of the Municipal Code. The shield should be painted to match the surface to which it is attached.
- Parking areas should have lighting capable of providing adequate illumination for security and safety. Lighting standards should be energy-efficient and in scale with the height and use of the on-site structure(s).
- Light fixtures and the design of parking lot lighting fixtures should be architecturally compatible with building design.
- All building entrances should be well lit with a minimum of five (5) footcandles.
- Parking lots and access thereto should be illuminated with a minimum of two (2) footcandles of lighting.



Light fixtures shall be architecturally compatible with building design.



The height of lamp poles is to be appropriate to the scale of the building or complex and the surrounding area.

- Height of lamp poles should be appropriate in scale for the building or complex and the surrounding area, maximum 20' high. Where adjacent to residential uses, light poles should not exceed 15' height. Exceptions to the maximum height may be considered for large shopping centers or other uses deemed appropriate by the Community Development Director
- Lighting devices should be protected by vandalism-resistant covers.
- Aisles, passageways and recesses related to and within a building complex should be illuminated with an intensity of at least twenty-five one-hundredths (.25) foot candles at the ground level during the hours of darkness.
- Walkways should be illuminated with a minimum of one footcandle to ensure safe night-time conditions.
- Pedestrian light poles along sidewalks or pathways should be between 12' to 15' high.

G. Lighting (Continued)

- Lighting fixtures should not project above the facia or roofline of the building.
- Security lighting fixtures should not be substituted for parking lot or walkway lighting fixtures.
- Exterior illumination of rooftop is prohibited.
- The level of light measured in footcandles, and type of bulb should be consistent with the Municipal Code requirement.
- Lighting of building elements and trees is encouraged; however, light sources for wall washing and tree lighting should be hidden.
- Up-lighting of trees is strongly encouraged to accentuate branch structure, foliage and form. Up-lighting should use commercially available fixtures specifically designed for this intended use. LED fixtures are preferred, but not required, due to low energy consumption and heat source properties. Lighting should be installed to reduce unnecessary glare by utilizing shrouded fixtures or glare reducing devices.



Parking lots and access to them are to be illuminated.



Walkways are to be illuminated to ensure safe nighttime conditions.