7

## **DESIGN GUIDELINES**

## 7.1 Purpose and Intent

The following Design Guidelines have been developed to ensure a quality, cohesive design structure for the Colony Commerce Center East development. Objectives of these design guidelines are:

- » To provide the City with the necessary assurances that the Specific Plan area will develop in accordance with the design quality and character proposed herein;
- » To serve as design criteria for developers, builders, engineers, architects, landscape architects and other professionals in preparing plans for construction; and
- » To lend guidance to City staff, Planning Commission and City Council in the review and evaluation of future development projects in the Specific Plan area.

Certain key design elements will contribute significantly to the visual order and consistency of the entire Specific Plan area and provide a quality development. The fundamental elements of these common features; site planning, architecture, landscape, and architecture design details are established by these Design Guidelines.

The design guidelines are intended to be flexible and illustrative in nature, with the capability of responding to unanticipated conditions, the market and design trends. Creativity and innovation, as well as consistent, and quality, are encouraged in the implementation of these guidelines.

## 7.2 Industrial Theme and Character

These Design Guidelines will ensure that the Specific Plan community is an environment that reflects the vision embodied in the following concepts:

- » Develop a quality, cohesive design concept and identity for the Colony Commerce Center East area.
- » Establish development standards that ensure lasting value for industrial and business developments.
- » The architectural image of the Specific Plan will be perceived primarily from the public realm. Therefore, building massing, scale and roof forms, as the primary design components, require articulation in their architectural expression as they relate to the public realm.
- » A theme wall/entry monument may be installed at the major project entries at the discretion of the builder or project developer.

## 7.3 Site Design

The Business Park and Industrial of the Colony Commerce East Specific Plan will allow for employment opportunities to be created for the City of Ontario and surrounding region. Residents of Ontario Ranch will have the ability to access employment not only by automobile but also via pedestrian multi-purpose trails from the surrounding residential neighborhoods.

The business park and industrial land uses should continue the pedestrian friendly character of the area, and implement appropriate site planning and architectural design and techniques to be complimentary to the adjacent land uses.

Site design should facilitate the intended functions of developed and open space areas, and provide for appropriate interactions between buildings and activity areas, goods movement, vehicular access and parking, and pedestrian and bicycle travel.

The following concepts are intended to facilitate design quality and compatibility between uses within the Colony Commerce Center East Specific Plan.

#### **Building Orientation**

- » Buildings should be oriented towards the street to provide focus on the building entries. Windows and architectural accent features should face the street to avoid long expanses of untreated walls facing both Merrill Avenue and Archibald Avenue. Parking and landscaping is encouraged to be located to the side and rears of the buildings (see Photo 7.1).
- » Buildings should be oriented to define the streetscene and provide for an aesthetically pleasing streetscape.

#### Street Frontage and Parking Lots

» Smaller scale buildings are preferred along the frontages of Merrill Avenue and Archibald Avenue. Small parking lots enhanced with landscaping and a buffer from both street right-of-ways is also acceptable. Building frontages along both Merrill



Photo 7.1 - Example of main building accents oriented towards street and entry



Photo 7.2 - Example of smaller scale business/industrial park buildings

Avenue and Archibald Avenue should be designed with windows, entries and architectural features to soften their appearance to the public view (See Photo 7.2).

» Parking lots should be designed to minimize impact to pedestrian walkways and service access. Large parking lots should be avoided, however, if necessary, a landscaped pedestrian walkway should be provided for safe access to buildings.

#### Loading, Storage Areas and Refuse Containers

- » Loading docks and storage areas should be oriented away from adjacent streets. Any visual impact to public views should be screened through the use of walls, landscaping, and/or equivalent features. Adequate room should be provided for trucks maneuvering or waiting to unload. Attractive and durable materials shall be used when designing loading areas.
- » Refuse containers and equipment shall be easily accessed by service vehicles but screened from

view of the streets, parking lots, and connecting walkways through the use of walls and/or landscaping. Screening details should incorporate elements that are compatible with the architecture style of the building. Equipment and enclosures shall not be located near pedestrian walkways. Roof-mounted equipment shall be screened by the roof/parapet.

#### **Building Design**

- » Building height variations, architectural projections, building pop-outs, stepping of floors, accent detailing, material change and color variety are encouraged to compliment the surrounding industrial land uses. Massing elements shall relate to the architecture style of the building and should be proportional and visually pleasing.
- » For larger buildings that are visible to the public, they shall include architectural treatments to avoid long expanses of untreated walls, and break up building massing, through the use of building

- height changes, small projections, changes in color or texture or similar architectural treatments.
- » Typical ground-mounted equipment (such as transformers and heating units) should be screened by landscaping where they would otherwise be within public view.
- » Where long, linear walls or fences are needed, a combination of wall/fence with dense landscaping shall be provided.
- » The mass of new structures, as visible from public views, should be softened by landscaping or lessened by small-scale elements such as windows, panels, entrances, and other detail features to avoid monotony in design (See Photo 7.3).

#### **Roof Form**

» Roof forms should be simple and avoid a massive appearance. Buildings shall use height variations to break up the roofline and create a more interesting visual appearance.

#### **Entry Design**

- » Entries and windows are encouraged to face streets and pedestrian walkways. Primary building entries shall be easily identified through the massing of the building. Greater height can be used to highlight and accentuate entries in the form of tower elements, tall voids, a central mass or an entry plaza. Secondary entries may use smaller building masses to communicate their locations.
- » Major vehicular and pedestrian entries to the site from the public street system should be readily visible. Major entries to planning areas, other than truck entries should be marked by accent pavement with accent trees and other enhanced landscape features.

#### **Design Flexibility**

» Building design should be flexible in order to adjust to various future market demands. Parcel sizes should be flexible and vary in size to accommodate a variety of building types.



Photo 7.3 - Example of building and landscape treatments to soften views from the public right of way

#### **Base and Top Treatments**

» Building design should encourage the use of base and top treatments to help balance the "weight" of the building visually. Bases should appear to "ground" the building, while tops create a defined edge to the roofline. Base treatments may include changes in texture or material and enriched landscaping. Top treatments may also include changes in texture or material, and may also include cornices or roof overhangs.

#### **Roof Materials**

» Roofing materials should be durable yet compatible to the building's architectural style.

#### **Material Changes**

» Avoid the false appearance of lightweight veneers by hiding material changes through careful detailing. Material changes should not occur at external corners, but may occur at "reverse" or interior corners or as a "return."

#### Color

» For larger building surfaces colors, should be muted and softer colors used. Accent colors may include brighter and darker colors.

## 7.4 Parking/Loading Facilities

The following concepts are intended to facilitate design quality and compatibility between industrial uses within the Colony Commerce Center East Specific Plan.

- » Site entries shall compliment the architectural development by utilizing enhanced pavement treatment in vehicular areas, accent trees, and color planting. Enhanced paving shall extend from the back of the approach apron, into the site, to the first interesecting drive aisle or parking space.
- » No required parking or loading facilities shall be located in any required landscape setback.
- » All outdoor refuse collection areas shall be decorative and should be visually screened.

- » All loading areas shall be screened from public view by buildings or by eight foot high wall (minimum). A line of sight study will determine the final height of the wall. Landscaping should be incorporated to visually soften the appearance of walls.
- » Driveways and parking areas should be separated from adjacent sidewalks or landscaped areas by a curb not less than six inches high.
- » Development shall provide trees within the vehicular use areas at a ratio of one tree for every 10 parking stalls. The trees shall consist of 24" and 36" box sized trees. See Section 7.7.1 for percentages of tree sizes.



Photo 7.4 - Example of typical screen wall with landscaping

### 7.5 Walls and Fences

The following section is intended to encourage design quality, as walls and fences are an important component to ensuring a safe and secure environment within the Colony Commerce Center East Specific Plan.

- » Walls at loading areas shall be at least six feet in height, or as approved by the City in response to screening loading activities from off-site views from the adjacent public right-of-way.
- » Chain link fencing shall be permitted for use in interior truck courts, in non-public viewing areas. Chain link fencing may not be used along public views.
- » Walls fronting on streets may be constructed of concrete tilt up or masonry materials such as split face or slump stone (See Photo 7.4).
- » Tubular Steel fencing shall be permitted along the Cucamonga Creek Channel if areas are not required to be screened from public views.

- » Entry monuments shall be designed and located in accordance with City of Ontario Traffic and Transportation Guidelines for monument placement.
- » Any proposed entry gates shall be reviewed by the Traffic and Transportation Division, and permitted only if approved.

## 7.6 Site Lighting

The following section addresses illumination of on-site areas for purposes of safety, security, and nighttime ambience, including lighting for parking areas, pedestrian walkways, graphics and signage, architectural and landscape features, shipping and loading areas, and any additional exterior areas.

Streetlights shall conform, both in type and location, to the Standards of the City of Ontario at the time of installation.

- » A comprehensive lighting plan shall be prepared and approved in conjunction with the site plans submitted for approval to the DAB. In addition, all plans shall be reviewed and approved by the Ontario Police Department.
- » Exterior lighting should be located and designed to minimize direct glare beyond the parking lot.
- » The design of lighting fixtures shall be consistent throughout individual planning areas, and shall be compatible with the architectural style of the building within each development.
- » Lighting sources shall be shielded, or diffused in order to avoid glare to pedestrians and motorists. Lighting fixtures should be selected and located to confine the area of illumination to within the site boundaries.
- » Architectural lighting of building facades is encouraged to enhance and emphasize the buildings identity.

## 7.7 Landscape

This section describes the minimum landscape requirements that shall be followed in the design of all public and private improvements within the Specific Plan. All proposed landscaping shall promote the aesthetic character and value of the Colony Commerce Center East Specific Plan area.

#### 7.7.1 General Provisions

- » The landscape design shall meet the requirements of the City of Ontario Landscape Development Standards as outlined within the Ontario Development Code and Traffic and Transportation Design Guidelines for sight-distance requirements.
- » The landscape design shall incorporate a mix of container size trees and shall comply with the following minimum percentages: 5% of trees shall be 48" box size. 10% shall be 36" box size. 30% of trees shall be 24" box size.
- » The use of drought tolerant plants is strongly encouraged (See Photo 7.5).



Photo 7.5 - Example of Industrial building and drought tolerant landscaping

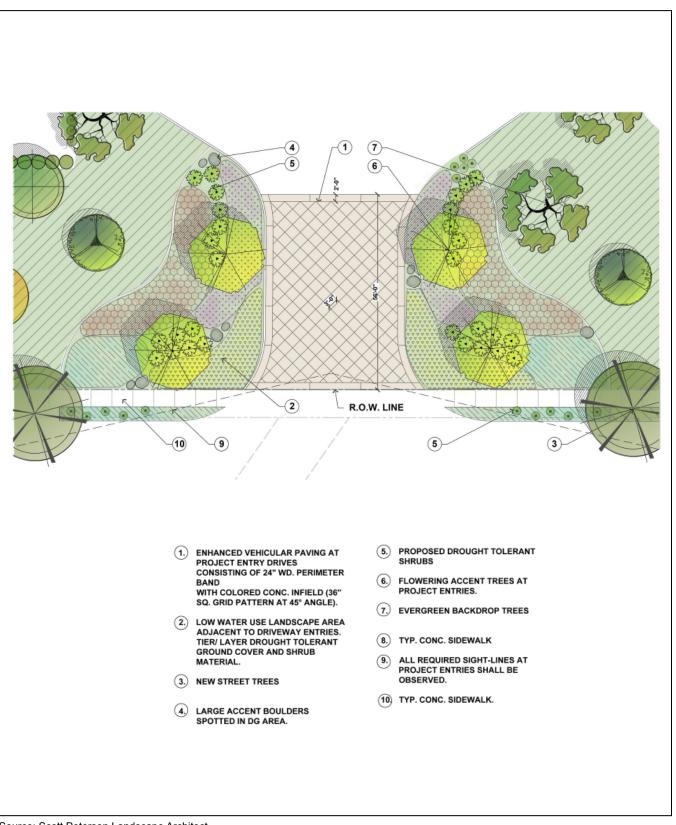
Exhibit 7.1, Conceptual Landscape Master Plan



Source: Scott Peterson Landscape Architect

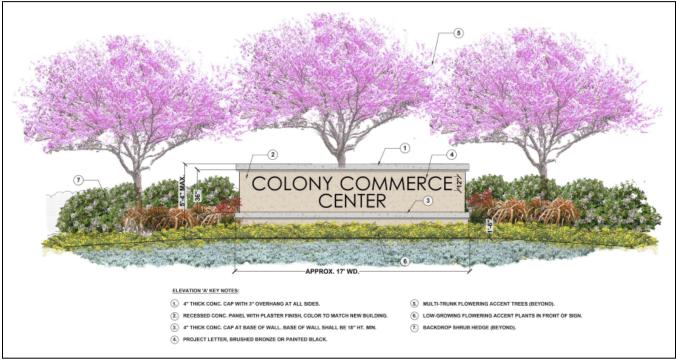
N. T. S.

**Exhibit 7.2, Project Entry Drives** 



Source: Scott Peterson Landscape Architect

## Exhibit 7.3, Example Project Entry Monument



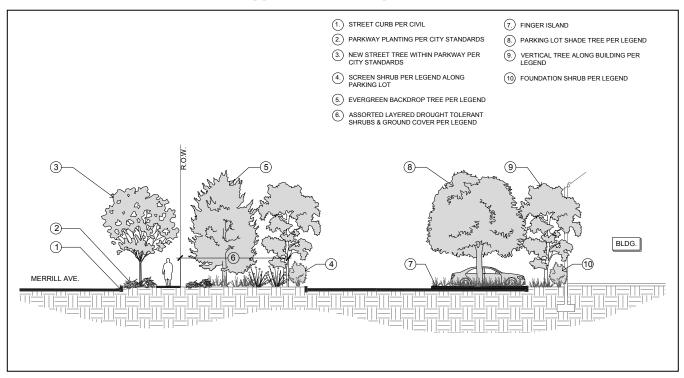
Source: Scott Peterson Landscape Architect

- » Plants shall be grouped into designated 'hydrozones' with similar irrigation requirements.
- » All detention basins shall receive container plants and a hydroseed application of low water using plants that can also tolerate seasonal water inundation.
- » Rock riprap material shall be installed where stormwater drain lines connect to infiltration areas or wherever paved area drainage surface flows directly into depressed landscape areas, via curb cuts or other surface conveyances.
- » Trees and landscape design for Master Planned streets such as Merrill Avenue shall meet the requirements of the Ontario Ranch Streetscape Master Plan.
- » All utility equipment such as backflow units, electrical transformers, fire detector checks, and

fire check valves shall be screened with evergreen shrubs and should be painted a dark green color.

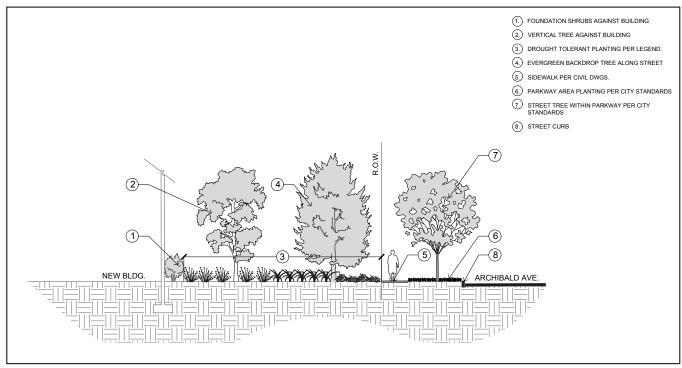
- » Compacted decomposed granite (DG) material may be incorporated at accent areas such as project entry drives and other focal areas, but limited to a max of 5% of the landscape area. Large accent boulders may be incorporated into DG areas.
- » Low water type of plants including California natives and succulents that thrive in the area's micro-climate shall be incorporated.
- » Project entry drives and corner intersection areas shall receive an "intensified" landscape treatment consisting of, but not limited to colorful ground cover and shrubs, and flowering accent trees.
- » Parking stalls facing public streets shall include a 36" high hedge adjacent to parking area.
- » Landscape shall be irrigated with automatic irrigation systems.

## Exhibit 7.4a, Typical Landscape Cross Section - Merrill Avenue



Source: Scott Peterson Landscape Architect

Exhibit 7.4b, Typical Landscape Cross Section - Archibald Avenue



Source: Scott Peterson Landscape Architect

- » Irrigation systems shall incorporate smart weatherbased or moisture sensor irrigation controller(s) for water conservation.
- » Design of low flow drip irrigation systems, where appropriate.
- » Irrigation backflow units shall be specified in a theft proof lockable protective steel cage enclosures.
- » Irrigation controllers shall be in a theft proof enclosure or inside the buildings electrical room.

### 7.7.2 Landscape Standards

- » All landscape area planters shall have a minimum inside dimension of 5' feet wide, plus the required curbs.
- » Parking spaces adjacent to planters shall have a 12" wide curb for ease in stepping out from vehicles.
- » Provide parking lot trees in planter islands at the ratio of one tree for every 10 parking spaces.
- » All 2:1 slopes and greater shall be installed with permanent rolled erosion control product (RECP netting), typical.
- » A layer of mulch within all landscaped areas shall be provided to retain soil moisture and mitigate soil erosion. Compacted decomposed granite material is an acceptable alternative if Southern California native plants (Coastal Sage Scrub or Chaparral plant communities) are used to a maximum of 5% of the landscape area. Planting plans shall show plant spacing no greater than the maximum mature width.
- » All slopes 3:1 or greater shall be stabilized with spreading erosion control ground cover.
- » Foundation shrubs shall be incorporated at base of building to minimize scale of building (min. 5 gal. size at 36" max. spacing).

- » Project entry drives shall incorporate enhanced vehicular decorative paving, which may consist of colored concrete with a stamped pattern or scoreline grid pattern at 45 degree angle or similar.
- » A 24" clearance from back of parking lot curb to parking lot screen hedge shall be provided for car bumper overhang. Mulch over weed abatement filter fabric shall be provided within this area.
- » Chain link fencing shall be permitted for use in interior truck courts, in non-public viewing areas.
- » Provide durable perimeter screening trees for shade and windbreaks.
- » Provide 36" high strappy leaf shrubs to screen utilities such as backflow devices. Use taller evergreen shrubs to screen the sides of transformer units and include maximum 12" high groundcovers in areas to access utilities.
- » Landscape shall define and accent entries, pedestrian walkways and architectural features. Landscape shall be attractive and appropriate to define and complement the space and use.
- » Entry monuments shall be designed in accordance with City of Ontario Traffic and Transportation Guidelines for monument placement.
- » The Landscaping Plan shall comply with City Standard drawings and Traffic and Transportation Guidelines for sight-distance.

#### 7.7.3 Plant Palette

The Plant Palette on Table 7.1, was selected to complement and enhance the thematic setting for the Ontario community, appropriateness to climatic and soil conditions, ease of maintenance and water conservation.

Table 7.1, Plant Palette

Use	Botanical Name	Common Name
Parking Lot Trees	Koelreuteria Bipinnata	Chinese Flame Tree
	Koelreuteria Paniculata	Golden Rain Tree
	Magnolia Grandiflora	Southern Magnolia
	Pistachia Chinensis	Chinese Pistache
	Platanus Acerifolia	London Plane Tree
	Platanus Racemosa	California Sycamore
	Podocarpus Gracilior	Fern Pine
	Quercus Agrifolia	Coast Live Oak
	Quercus Ilex	Holly Oak
	Quercus Engelmanii	Mesa Oak
	Tipuana Tipu	Tipu Tree
	Tristania Conferta*	Brisbane Box
	Ulmus Parvifolia*	Evergreen Elm
Street Trees	Quercus Agrifolia	Coast Live Oak
(min. 24" box size)	Quercus Ilex*	Holly Oak
T.	Eucalyptus species	Eucalyptus
Evergreen Screen Trees	Pinus Eldarica*	Mondell Pine
Screen frees	Quercus Agrifolia*	Coast Live Oak
	Quercus Ilex	Holly Oak
	Tristania Conferta*	Brisbane Box
TD 4.1.	Callistemon Viminalis	Weeping Bottlebrush
Trees Adjacent to Buildings	Cercis Occidentalis	Western Redbud
to buildings	Cupressus Sempervirens	Italian Cypress
	Geijera Parviflora*	Australian Willow
	Koelreuteria Bipinnata	Chinese Flame Tree
	Koelreuteria Paniculata	Golden Rain Tree
	$Lagerstroemia\ Indica*$	Crape Myrtle
	Laurus Nobilis	Sweet Bay Tree
	Melaleuca Quinquinervia	Cajeput tree
	Olea Europaea 'Swan Hill'	Small Fruitless Olive

Use	Botanical Name	Common Name
	Pinus Canariensis	Canary Island Pine
	Pinus Eldarica	Mondell Pine
	Podocarpus Gracilior*	Fern Pine
	Podocarpus Macrophyllus	Yew Pine
	Tristania Conferta	Brisbane Box
	Callistemon Viminalis 'Little John'	Dwarf Bottle Brush
Tall Shrubs	Cistus Spp.	Rockrose
	Dodonaea Viscosa*	Hopseed Bush
	$Heteromeles\ Arbutifolia$	Toyon
	Juniperus Chinensis x Pfitzeriana	Pfitzer Juniper
	Lantana Camara	Bush Lantana
	Leptospermum Laevigatum	Australian Tea Tree
	Leucophyllum Candidum	Violet Silverleaf
	$Leucophyllum\ Frutescens*$	Texas Ranger
	Leucophyllum Laevigatum	Chihahuan Rain Sage
	Leucophyllum Pruinosum	Sierra Bouquet
	Ligustrum Texanum*	Texas Privet
	Pittosporum Tobira Variegata*	Mock Orange
	Prunus Caroliniana 'Compacta'	Dwarf Cherry Laurel
	Rhamnus Californica	Coffeeberry
	Rhaphiolepis Springtime	Indian Hawthorn
	Rhaphiolepis 'Pink Lady'*	Indian hawthorn
	Rosa Sp. 'Iceberg Rose'	White Rose
	Rosmarinus O. 'Tuscan Blue'*	Bush Rosemary
	Salvia Clevelandii*	Chaparral Sage
	Salvia Greggii*	Autumn Sage
	Tecoma Stans	Yellow Trumpet Flower
	Viburnum Japonicum	Viburum
	Westingia Fruticosa	Coast Rosemary
	Xylosma Congestum	Shiny Leaf Xylosma
Low Shrubs / Groundcover	Acacia Redolens 'Prostrata'	Prostrate Acacia
	Baccharis x 'Centennial'	Prostrate Desert Broom
	Baccharis Pilularis 'Twin Peaks'*	Dwarf Coyote Bush

Use	Botanical Name	Common Name
	Carex Divulsa	Berkley Sedge
	Carex Pansa	California Meadow Sedge
	Carex Praegracilis	Clustered Field Sedge
	Carissa 'Green Carpet'	Prostrate Natal Plum
	Ceanothus Griseus Horizontalis	Caramel Creeper
	Cotoneaster Horizontalis	Rock Contoneaster
	Dalea Gregii	Trailing Indigo Bush
	Dietes Bicolor	Fortnight Lily
	Juniper Horizontalis 'Varieties'	Trailing Juniper Varieties
	Lantana Montevidensis	Trailing Lantana
	Leymus Arenarius	Lyme Grass
	Lomandra Longifolia	Nyalla
	Lonicera Japonica*	Hall's Honeysuckle
	Mahonia Repens	Creeping Mahonia
	Muhlenbergia Capllaris*	Pink Muhly
	Muhlenbergia Rigens*	Deer Grass
	Myoporum Pacificum	Creeping Myoporum
	Pittosporum Tobira 'Wheelers Dwarf'	Wheelers Dwarf Pittosporum
	Rosmarinus Officinalis*	Rosemary
	Rosa Floribunda 'Carpet Rose'	Carpet Rose
	Salvia Apiana	White Sage
	Salvia Mellifera	Black Sage
	Senecio Mandraliscae*	Senecio
	Trachelospermum Jasminioides	Star Jasmine
	Yucca Aloifolia	Spanish Bayonet
	Yucca Baccata	Banana Yucca
	Yucca Elata	Soaptree Yucca
	Yucca Gloriosa	Spanish Dagger
	Yucca Rigida	Blue Yucca
	Yucca Whipplei	Our Lord's Candle
	Phoenix Canariensis	Canary Island Palm
Palm Trees	Phoenix Dactylifera,	Senegal Date Palm
	Washingtonia Filifera	California Fan Palm

 $<sup>\</sup>hbox{*-}Acceptable planting option within the Cucamonga Creek channel easement area.}$ 

## 7.8 Perimeter Streetscape Design

Streetscape design guidelines establish a hierarchy for the landscape development along the surrounding roadways, as well as establish a framework for consistency of design. Two roadways surround the project site as follows:

- » Merrill Avenue to the North
- » Archibald Avenue to the East

Merrill Avenue and Archibald Avenue shall be designed with Low Impact Development Site Design BMP's to retain/infilter or biotreat 85th percentile storm event runoff from newly-widened portions of these streets, per the requirements of the current San Bernardino County Water Quality Management Plan.

Landscape development surrounding this project will help to set the character, while maintaining consistency with the City of Ontario's pedestrian pathway system as illustrated in the "Trails and Open Space System" section of the Ontario Ranch Streetscape Master Plan. Streetscape sections described below are located on Exhibit 7.4a, and 7.4b, "Typical Landscape Cross Sections."

# 7.9 Sustainable Design Strategies

Sustainable practices can lessen the environmental impacts of development in many ways through the use of certain design techniques. These techniques can include reduced pervious surfaces, improved water detention and conservation, preservation of habitat areas, water-efficient irrigation, and improved pedestrian and bicycle amenities which reduce reliance on smoggenerating vehicles. This Specific Plan encourages the implementation of sustainable design strategies referenced below and in Appendix B1, with the goal to reduce Greenhouse Gas Emissions.

## 7.9.1 Site Planning

» Incorporate "green" practices in developing buildings and infrastructure.

- » Wherever possible, design and grade the project to direct 2-year storm event runoff from building roofs and paved areas, into swaled landscape areas for capture and retention/infiltration. In particular, open space, parks, landscaped setback areas and trails are to be used for this purpose. Include deciduous trees to shade paved areas and building walls on south and west.
- » Stabilize slopes to limit erosion as part of the Stormwater Management Plan and erosion control plan.

#### 7.9.2 Energy Efficiency

Where feasible and appropriate, the following energy conservation strategies are encouraged:

- » Passive design strategies can dramatically affect building energy performance. These measures include building shape and orientation, passive solar design, and the use of natural lighting.
- » Develop strategies to provide natural lighting to reduce reliance on artificial lighting.
- » Install high-efficiency lighting systems with advanced lighting controls.
- » Use a properly sized and energy-efficient heat/ cooling system in conjunction with a thermally efficient building shell.
- » Promote the use of light colored roofing with a high solar reflectance in order to reduce the heat island effect from roofs.
- » Include deciduous trees to shade paved areas and building walls on the south and west sides.

## 7.9.3 Materials Efficiency

» Sustainable construction materials and products are encouraged to have characteristics such as reused and recycled content, zero or low off gassing of harmful air emissions, zero or low toxicity, sustainably harvested materials, high recyclability, durability, longevity, and local production. Such products promote resource conservation and efficiency. Using recycled-content products also helps develop markets for recycled materials that are being diverted from California's landfills, as mandated by the Integrated Waste Management Act.

- » Encourage the use of low VOC paints and wallpapers.
- » Encourage the use of low VOC Green Label carpet.
- » Encourage the use of material efficiency strategies. These strategies reduce the amount of building materials needed and cut construction costs. Consider designing rooms on four foot multiples to conform to standard-sized wallboard and plywood sheets.
- » Consider using recycle base, crushed concrete base, recycle content asphalt, shredded tires in base and asphalt in roads, parking areas and drive aisles, if feasible and economically viable.
- » Design with adequate space to facilitate recycling collection and to incorporate a solid waste management program that prevents waste generation.
- » Encourage the use of building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project.
- » Encourage the use of rapidly renewable building materials and products (made from plants that are typically harvested within a ten-year cycle or shorter). Examples of materials that could achieve this goal include, but are not limited to, bamboo, wool, cotton insulation, agrifiber, linoleum, wheatboard, strawboard and cork.

#### 7.9.4 Water Efficiency

- » Strive to minimize wastewater by using ultra lowflush toilets, low-flow shower heads and other water conserving fixtures.
- » Encourage the use of recirculating systems for centralized hot water distribution.
- » Smart irrigation controller which automatically adjusts the frequency and/or duration of irrigation events in response to changing weather conditions for all landscaped areas are required.
- » Drip irrigation, bubblers, micro-irrigation or other low precipation irrigation or water conserving technology shall supply water for irrigitation.
- » Encourage the use of recycled water to irrigate landscape areas throughout the project. The non-potable irrigation system shall be designed to meet all applicable standards of the California Regional Water Quality Control Board, California Department of Health, San Bernardino County Health Department, City of Ontario Department of Water and Power, and Ontario Municipal Code.

## 7.9.5 Occupant Health and Safety

- » Choose construction materials and interior finish products with zero or low emissions to improve indoor air quality as feasible.
- » Provide adequate ventilation and a high-efficiency, in-duct filtration system. Heating and cooling systems that ensure adequate ventilation and proper filtration can have a dramatic and positive impact on indoor air quality.
- » Provide effective drainage from the roof and surrounding landscape.
- » Encourage building systems to control humidity.

» Provide outdoor employee break areas with shade structure or shade trees on the west and south sides as feasible.

#### 7.9.6 Landscape Design

- » Use low or medium water use and native plant materials where appropriate. Minimize turf areas in order to promote water conservation. Limit the use of turf to areas which experience high functional use and are needed to accommodate outdoor activities. Only use warm-season turf varieties which are suited to the climate.
- » Provide plant materials that are well suited to the solar orientation and shading of buildings.
- » Group plants according to water use, slope aspect and sun/shade requirements. Irrigate each hydrozone on a separate valve using high-efficiency irrigation techniques.
- » Use organic wood or shredded bark mulch and soil amendments to retain soil moisture.
- » Incorporate native vegetation into the plant palette for Colony Commerce Center East.