

APPENDIX “H”

RESIDENTIAL LANDSCAPE GUIDELINES

Prepared For:
THE GUSTI RESIDENTIAL OVERLAY ZONE

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A. INTRODUCTION

The residential landscape component should be consistent with the overall concept and framework developed for the Guasti Plaza Specific Plan. It should reflect and reinforce the region's agrarian roots and the historic significance of the Guasti winery. The design features should incorporate historic artifacts found on the site that could be replicated or reused where appropriate. These elements should provide connectivity to the historical features of the Guasti site and its past uses. Site elements that create visual and physical connection should include enriched decorative pavements; water fountains; site furniture to include benches, pots, waste receptacles, drinking fountains, kiosks, site lighting, plant materials, walls and fences, and signage.

The character and image of the landscape concept should be defined by the site design elements, which should support and complement the architectural theme for the residential component and enhance the outdoor spaces. Landscape design elements of the plan include streetscape; project entry monumentation; surface parking lots; railroad edge treatment; and the open space common/recreation areas.

All elements of site design should follow the guidelines to ensure their design is part of the overall fabric of the Guasti Specific Plan. All landscape plans should meet current City standards as listed in the Development Standards for landscape and irrigation construction documents or as obtained in writing from the Public Facilities Development Department (PFDD). All projects are required to comply with identified objectives and standards and are strongly encouraged to follow the established guidelines.

Examples are shown for establishment of the general design intent and final design should be approved by the Public Facilities Development Department.



Streetscape & Landscape Elements

B. LANDSCAPE CONCEPT

1. STREETSCAPES

The streetscape element creates a unified framework along the street edges of the development and providing continuity throughout the Guasti Specific Plan and encompassing designated street trees, street lighting and signage. The overall landscape conceptual plan identifies specific tree species that should be used to reflect the agrarian character of the region. The eucalyptus windrow was a significant landscape skyline feature in the region and should be reinforced in the plan.

Other tree types, indigenous to the area and compatible to those tree species found in the preservation area, should be planted in informal groupings along the residential frontage roads as noted in the overall landscape concept.

The designated street tree for each streetscape treatment is as follows:

Via Old Guasti – Inter-planting of Eucalyptus trees and California Pepper trees.

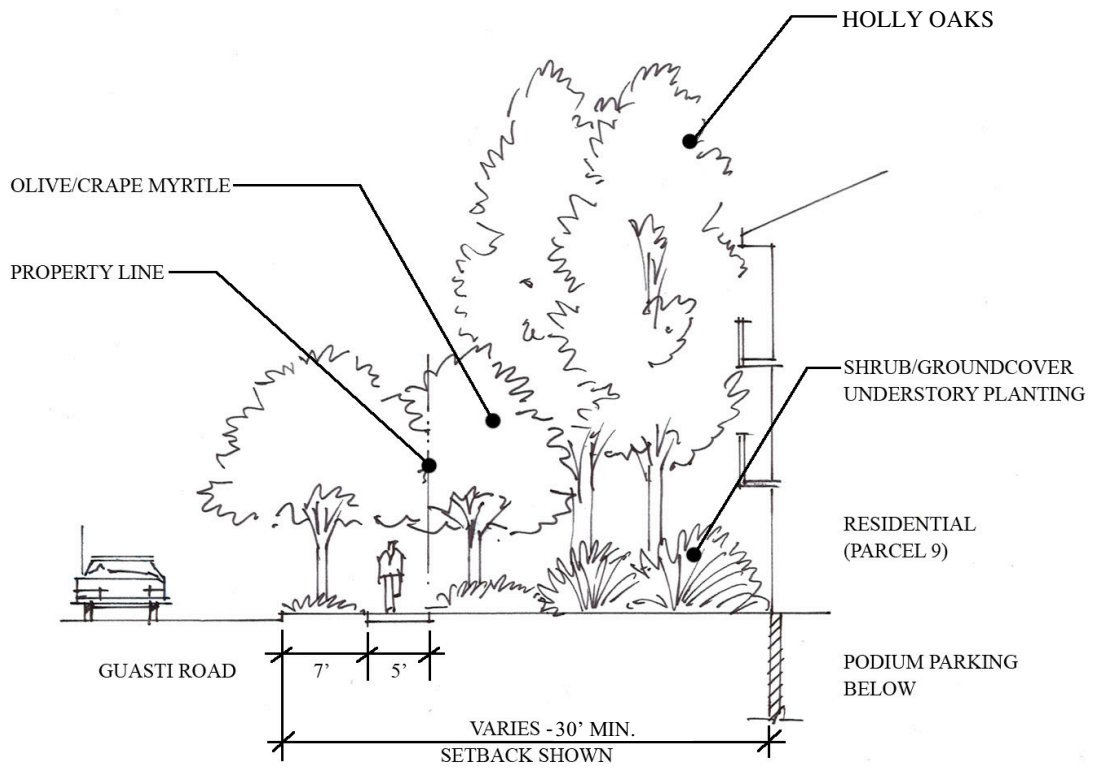
Guasti Road – Informal groupings of Olive, Holly Oak and Crepe Myrtle trees.

Turner Avenue – Pines in random groves together with Ash trees.

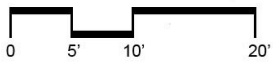
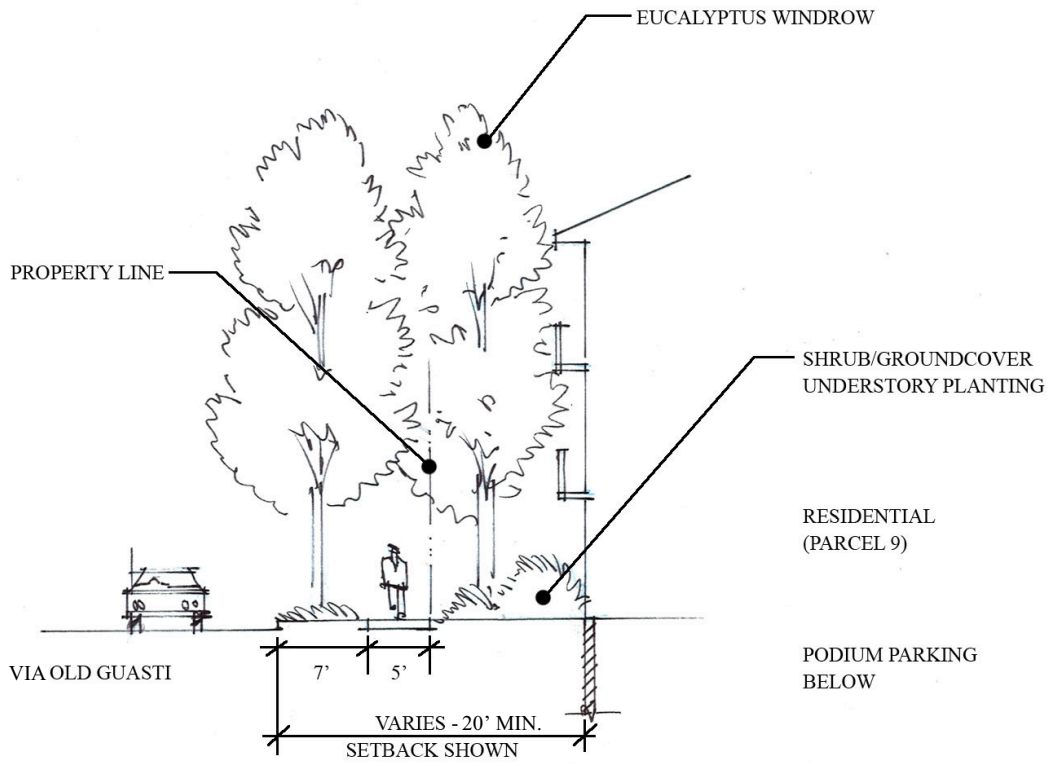
Biane Avenue – Informal drifts of Eucalyptus trees with flowering understory trees.

Design Guidelines:

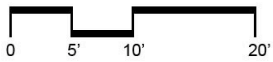
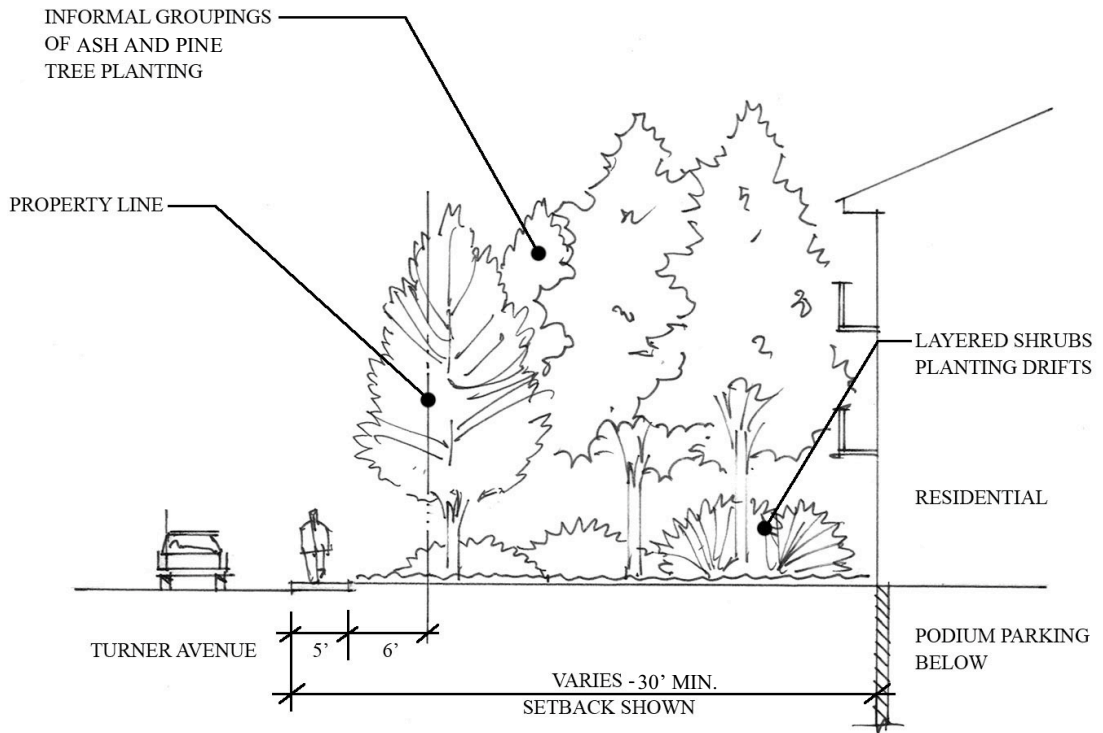
- Minimum tree planting setbacks:
 - 25' from beginning of curb returns at street intersections
 - 10' from light standards, power poles and fire hydrants
 - 7' from underground utilities
 - 5' from sidewalks (except in parkways), driveways, and buildings.
- Street trees should be minimum 24" box size.
- Provide one (1) tree for every twenty-five to thirty feet (25'-30') of linear property frontage.
- Foundation planting adjacent to building (hedgerows or shrub masses in a terraced arrangement) is required at major building perimeters and residential front yards to break horizontal ground plane from the vertical plane of building.
- Street light fixtures should be consistent, decorative in nature, and match those specified in the Guasti Plaza Specific Plan.
- Sidewalk concrete color and score pattern should match the Guasti Plaza Specific Plan.
- All parkway strips and landscaped, project setback areas shall be depressed at a minimum of 2" below top of curb or sidewalk and setback areas shall be depressed and designed as vegetative swales with a cross sectional slope of 3:1 towards a center flow lines.



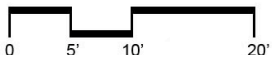
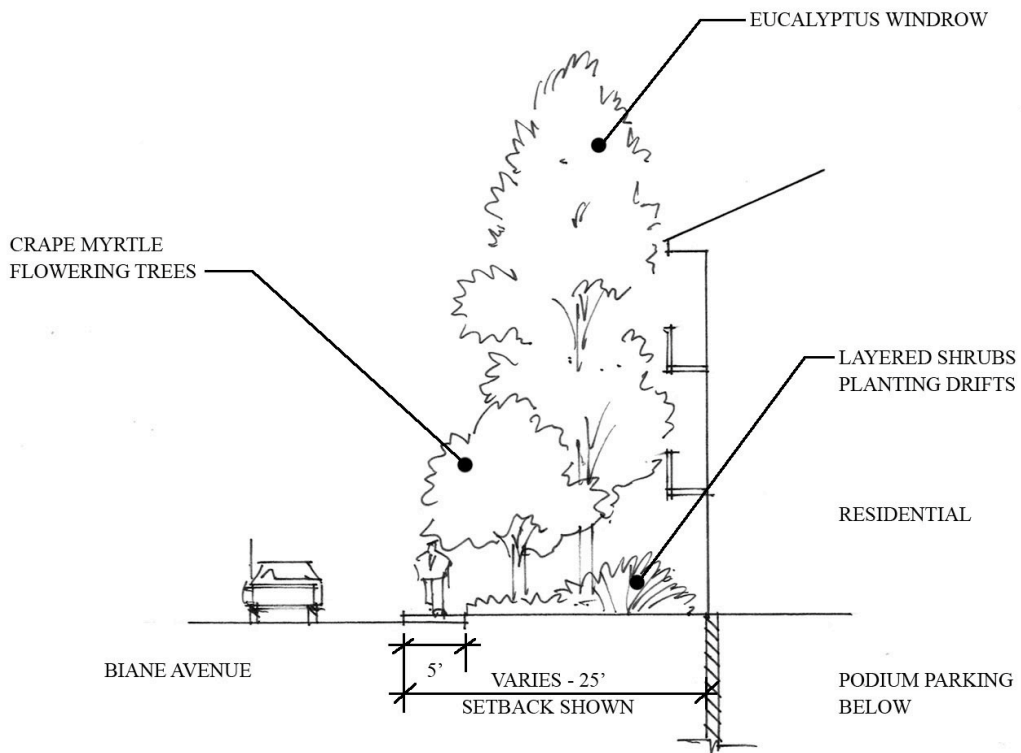
Section at Guasti Road



Section at Via Guasti Road



Section at Turner Avenue



Section at Biane Avenue

2. PROJECT ENTRY AND MONUMENTATION

At the corner intersections and main points of access at New Guasti Road and Turner Avenue (secondary monumentation); and at Via Old Guasti and Turner Avenue (tertiary monumentation), the entry statement should reflect a hierarchy of sign monumentation and landscape design. The monumentation should follow the theme of the Guasti Plaza Specific Plan expressing similar form, materials, and colors. The entrance into the Residential Overlay Zone should create a sense of place that is unique and identifiable to the residents.

Design Guidelines:

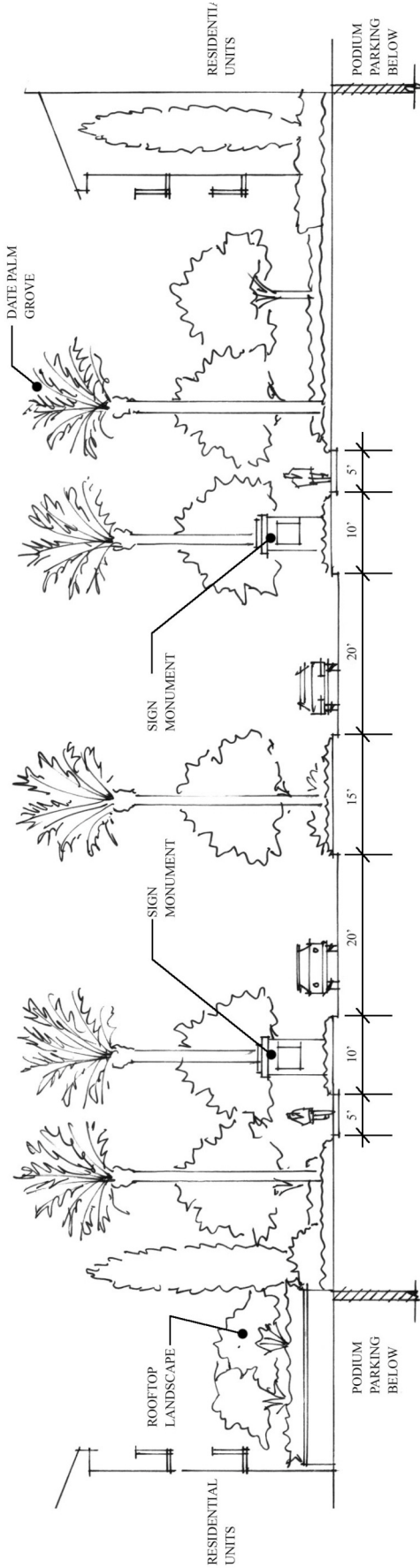
- Monumentation design hierarchy to utilize similar materials and colors that compliment the building architecture.
- Monumentation set back should maintain line of sight at the corner intersections. Landscape plant materials should not exceed 24" height within sight triangles calculated per City guidelines.
- Signage lettering should be brass or brushed aluminum, or similar high quality material.
- Monument lighting should be screened from pedestrian and vehicular view, with the exception of decorative lighting.
- Plants at monument signs should be a layered plantings of ornamental shrubs or perennials.
- Accent trees (single or multi-trunk specimens) should be incorporated at corner statements, vehicular entries, and major corner intersections. All accent trees should be min. 36" box. Palms shall be min. 17' brown trunk height (BTH) and minimum 4 ½' cubed rootball.
- All monumentation shall be designed in accordance with the City of Ontario Traffic and Transportation Guidelines for Monument Placement and City Standards for Corner Sight Distance. All monumentation in the public right-of-way shall be subject to the approval of the City Engineer.



Primary Entry Monumentation



Secondary Entry Monumentation



Project Entry and Monumentation from Turner Road

3. SURFACE PARKING LOTS

Canopy trees in the surface parking lot areas should help reduce reflective glare off the parking lot surface and should be organized in an orchard pattern. Trees that provide a shade canopy and retain the agricultural setting include the Olive Tree or African Sumac. Grape vines should be incorporated to reinforce the “vineyard” theme and will serve as a hedge treatment. Parking lots should be designed with convenient safe, and efficient pedestrian connections to buildings entry areas, and adjacent pedestrian routes. The main pedestrian routes and street crossings should be easily recognizable, accessible, and enhanced with decorative pavement.

Design Guidelines:

- Parking areas visible from public streets or adjacent parcels should be screened with three feet (3') minimum height landscaping, allow for two feet overhang of vehicles unless wheel stops are provided.
- Parking lots should have canopy shade trees in landscape islands (one for every 10 spaces single row and one for every 5 spaces per double row). Parking lot double rows should have a 5' wide center planter strip that could include an infiltration trench, if required. Canopy shade trees should have a minimum canopy of 25' - 30'.
- Planters adjacent to parking stalls should have a 12" wide curb for access to vehicles.
- Trees in parking areas should have high-branching, broad-headed form to create maximum shade.
- Curbed planting areas should be provided at the end of each parking aisle to protect parked vehicles from turning movements of other vehicles.
- Landscaping in parking lot interiors and at entries should not obstruct drivers' clear sight lines to oncoming traffic.



Parking Lot Grove Tree – African Sumac



*Orchard Character –
Parking Lot & Drive*



*Orchard Character –
Parking Lot Pedestrian Routes &
Connections*



*Vineyard Character –
Grape Vines Between Parking Lot Trees*

4. RAILROAD EDGE TREATMENT

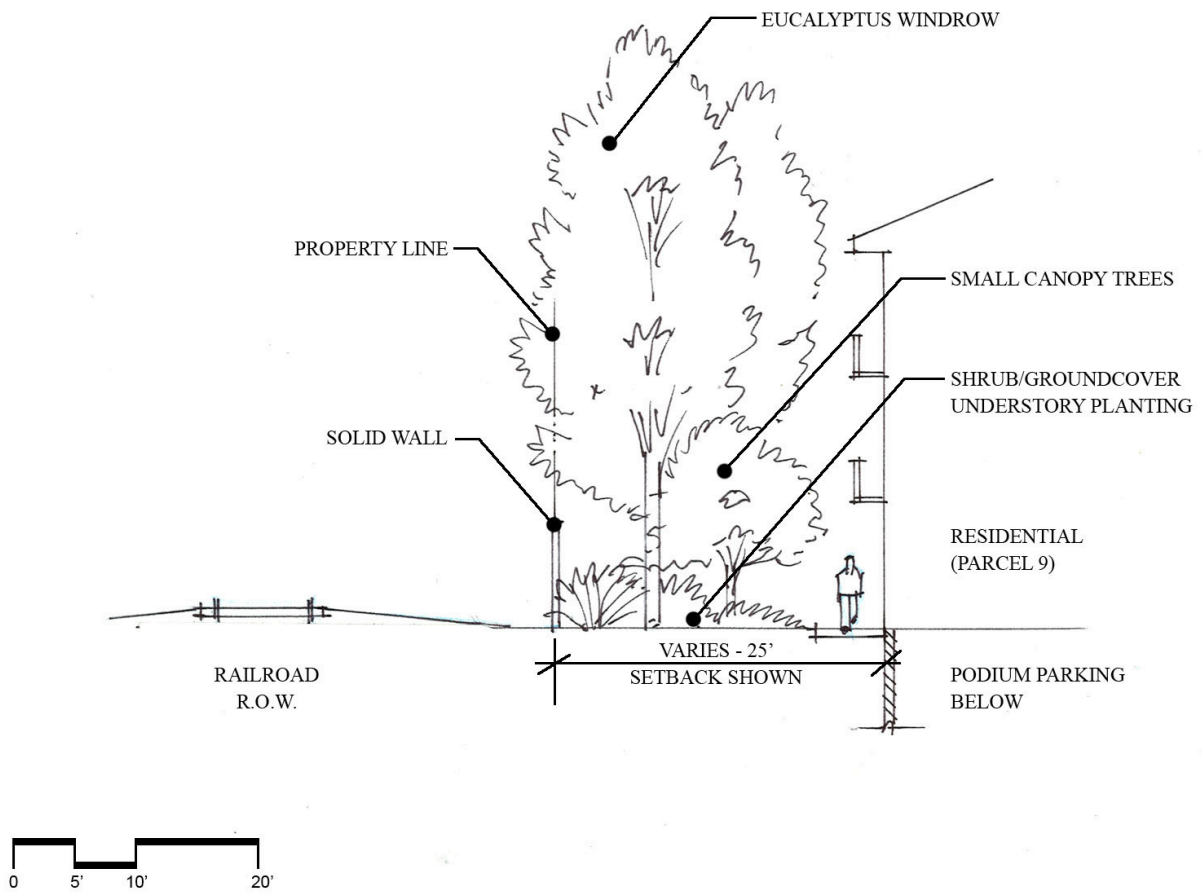
The landscape treatment along the railroad right-of-way should emphasize the character of an agricultural windrow, a significant landscape element in the region, and reinforce the importance of the railroad transportation corridor; as described in the Guasti Plaza Specific Plan. A dense eucalyptus tree canopy should be established to act as a living bio-filter for particulate air pollution.

Design Guidelines:

- A solid block wall should be provided along the southern boundary to serve as a barrier to exterior recreational areas and residential units.
- Eucalyptus tree species should provide a dense canopy and create a windrow landscape affect.
- Understory plantings of small flowering trees, and shrubs and groundcover planting should provide a buffer between the residential development and railroad right-of-way.



Eucalyptus Windrow



5. COMMON AREAS AND RECREATION AREAS

Common areas are experienced by the residents everyday, and the landscape design should be pleasant and inviting. The recreation areas provide public amenities for recreational play and places to gather. Courtyards and patio spaces provide alternative gathering areas and become focal points within the residential district.

The open space provides a means for physical connection with the neighboring Guasti Winery and the Residential Overlay Zone, as well as visual connection between the two areas.

Design Guidelines:

- Provide connectivity with adjacent uses and accessibility to public streets and sidewalks through interior walkways.
- Common areas to draw people into the space.
- The open space and common areas should include focal elements such as fountains, interpretive displays that reference the District historic features, murals or artwork, specialized detailing, such as ornamental gates, trellises, etc.
- Address safety and visibility issues with clear lines of sight and adequate lighting.
- Seating areas should be outdoor living spaces that provide conversational arrangements of benches, chairs, low tables and pots. The landscape design should provide shade and accent plant materials of distinctive texture and color.
- Pilasters, trellises, public art or other special features should announce entrances and pedestrian “gateways”.



Courtyard Entrance



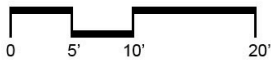
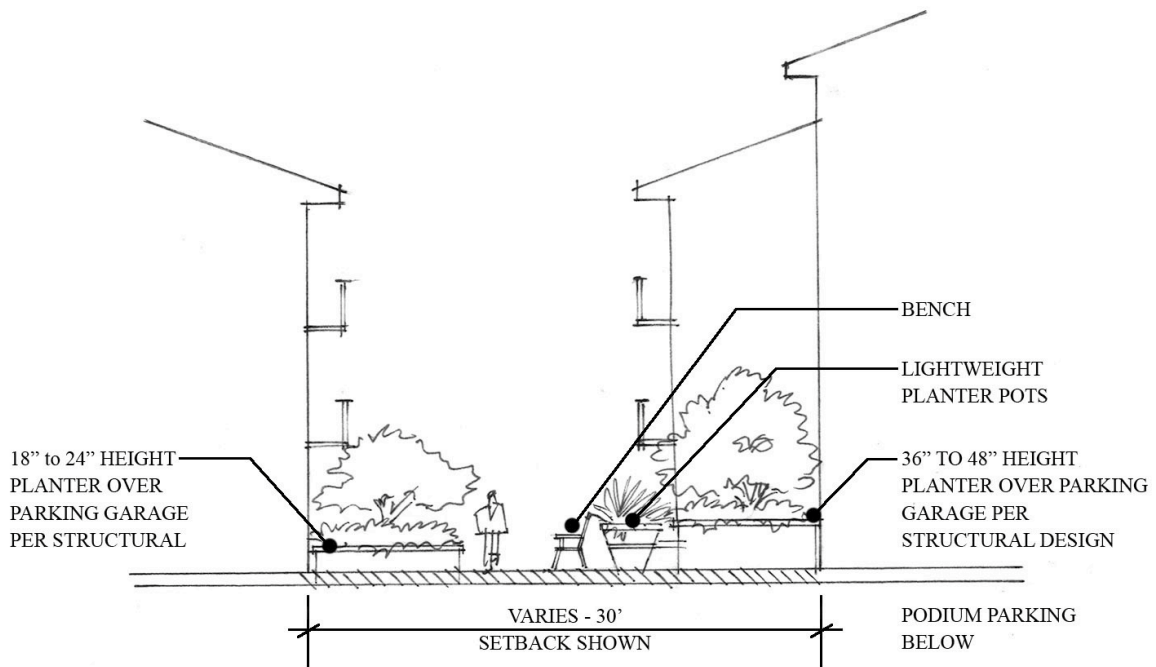
Recreation Area Character



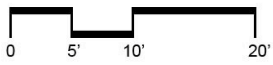
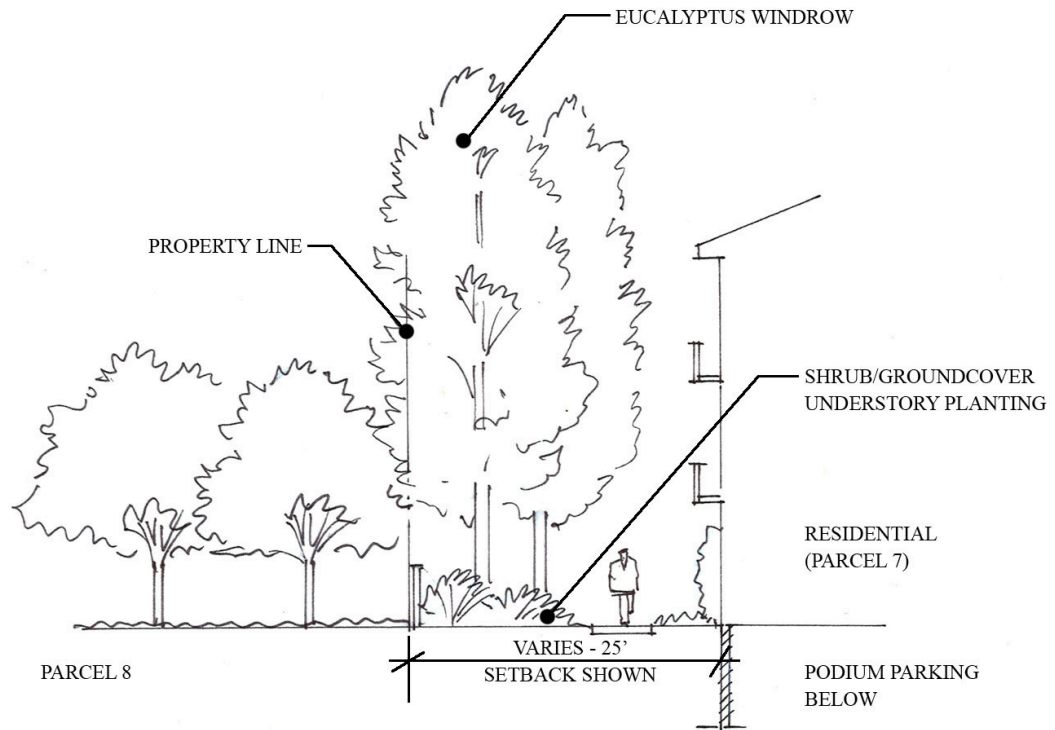
Courtyard – Fountain Focal Element



Courtyard – Accent Tree



Section at Residential Common Area Interior



Section Between Parcel 7 & Parcel 8

C. LANDSCAPE DESIGN ELEMENTS

The landscape design elements that include pavements, walls, fences, lighting, site furnishing and signage of the residential district complement the architecture and integrate interpretive features into the landscape and streetscape in the Residential Overlay Zone where appropriate, either by incorporating and / or replicating historic artifacts found in the Historic District of the Winery.

The materials, colors and forms of these detailed elements help to enhance the character and image of the residential district, while adding warmth and charm with the reference to the historic past.

1. PAVED SURFACES

Pedestrian surfaces should enhance and identify special locations such as public plaza, pedestrian alleés, and entrances. Similarly, driveway surfaces at key points, such as entrance drives or other road surfaces that may be traversed by pedestrians, should be enhanced with special paving.

Design Guidelines:

- Pedestrian areas and crossings should be clearly demarcated, and may be emphasized by decorative paving; recognizable scoring pattern, or accent bands.
- Recommended materials for pedestrian surfaces include:
 - Interlocking concrete masonry unit pavers;
 - Brick pavers;

Poured-in-place concrete with any of the following treatments: integral pigment color; color hardware; seeded aggregate; or ornamental insets, such as tile.



*Guasti Interpretive Plan –
Stone (Dry Laid)*



Flagstone Paving



Decorative Textured Concrete



Tile Pavers



Brick



Concrete Masonry Unit Pavers

2. WALLS AND FENCES

Wall and fence elements should be compatible with the building architectural character, utilizing similar materials and colors. Wall and fences provide separation between public and private courtyards, or recreation areas. They allow views into common areas and ensure a sense of safety and privacy for the private residence. Walls and fences serve as screening devices to enclose service yards, utilities, and trash areas from public view.

Design Guidelines:

- Overall height of wall/fence shall not exceed six (6) feet.
- Walls may occur as garden walls, planter walls, seat walls, or low retaining walls. Metal fences should be mounted on a low wall, and / or between pilasters.
- Wall openings, material changes, or design elements should be used to break up long expanses of uninterrupted fences and walls. Pilasters between wall/fence sections at minimum of 20 feet will add visual interest and interrupt long wall/fence expanses. The length of screening fences and walls adjacent to public right-of-ways should be minimized, where feasible.
- Pilasters are recommended to have a base, shaft and cap composition. Larger piers may be specially designed for gateway or other locations, incorporating ornamental plaques or interpretive signs; public art panels, sculptural elements; or decorative lighting. Ornamental finials, light fixtures, or roof caps may top pilasters.



*Guasti Interpretive Plan –
Wrought Iron Gate*



*Guasti Interpretive Plan –
Wrought Iron Gate*



*Guasti Interpretive Plan –
Wood Gate*



Brick, Tile, & Stucco Wall



*Wood Gate to Resemble Guasti
Interpretive Elements*

- Mechanical equipment, trash and recycling bins, transformers, and meters should be provided with architectural enclosures or fencing, sited in unobtrusive locations, and screened by landscaping. Colors and finishes of mechanical enclosures and equipment should be coordinated with colors and finishes of site furnishings and other painted metal surfaces used on site, or with the associated building’s material and color scheme.
- Pool enclosure fences should be designed to maintain an open character, utilizing vertical metal fencing, and shall meet all local health, building, and safety codes.
- Materials and colors:
 - Materials and colors should be compatible with the building architecture.
 - Fencing materials should be metal or iron fences.
 - For iron or metal fences, recommended materials include wrought iron, cast iron, welded steel or aluminum. All metal fences should be metalized and receive graffiti coating, rust inhibitor and weather protection coating system.
 - Wall materials should be decorative, consisting of split-face block, stone or brick veneer, or plaster finish. Wall caps should be precast concrete, concrete block, stone or stucco finish.
 - Exposed block walls may be constructed with a combination of varied height block courses and / or blended block face colors and textures. (Plain gray precision or slump block concrete block walls are not recommended.)
 - An anti-graffiti coating is recommended for exposed wall surfaces.



Wall Window Openings to Frame Views



Tubular Steel Fence



Stone Wall



Tubular Steel Gate & Handrails



Tubular Steel Fence

3. SITE FURNISHINGS

Public gathering places and other publicly accessible areas should be detailed with site furnishings to encourage community use and activity. The site furnishings design element should integrate and coordinate interpretative features into the streetscape and landscape as identified in the Guasti Interpretive Plan. These elements may incorporate artifacts or replication of artifacts to complement the agrarian theme and character. Elements that replicate the existing artifacts should be fabricated of heavy iron material. These elements include benches; freestanding planters; pots; ornamental trash and recycling receptacles; drinking fountains; bollards; signage; interpretative panels; and bicycle racks.

Design Guidelines:

- The design, materials and colors of manufactured furnishings within open spaces/common areas should be coordinated with the building architecture and / or other site and streetscape furnishings. Design and selection of furnishings should attempt to reinforce visual relationships to create a “family of objects” within the immediate project.
- Site furnishings should be made of durable, high quality materials, such as painted fabricated steel, painted cast iron, painted cast aluminum, and integrally colored concrete. Recycled materials may be used only if the finish or look of the material is consistent with or similar to the finishes described above. Masonry surfaces should be treated with an anti-graffiti coating. Metal surfaces should be coated with highly durable finishes.
- Site furnishings to be located in the rooftop development areas should be fabricated from lightweight materials.



*Guasti Interpretive Plan –
Concrete Lion-faced Planter*



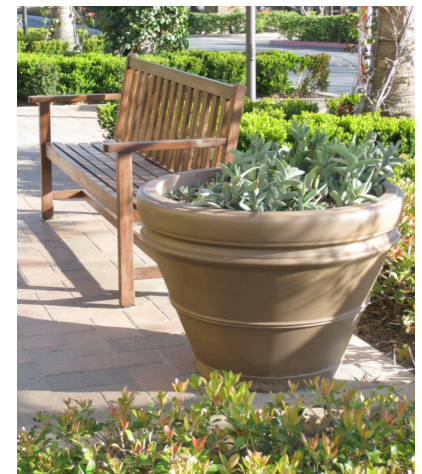
*Guasti Interpretive Plan –
Concrete Bench*



*Guasti Interpretive Plan –
Concrete Bench*



Cast Iron Bench



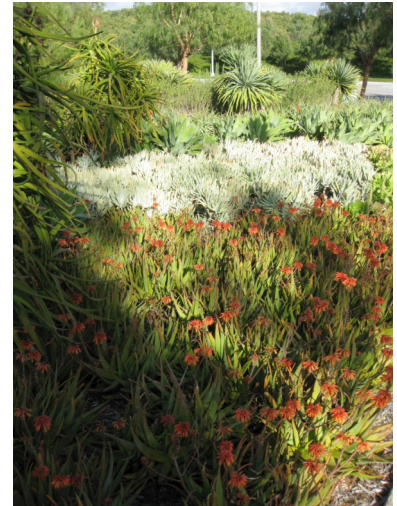
Wood Bench & Pot

4. PLANT MATERIALS

The selection of plant material should establish a visual framework with an agrarian landscape character. The suggested plants should have low water requirements, be suitable for the region, and appropriate for the unique site conditions and characteristics. The recommended plant palette provides a list of plants that are culturally and aesthetically compatible. Plant and landscape materials are selected and sited to reflect both ornamental and functional characteristics. Full-headed shade trees, shrubs, and flowering materials all add to the overall impression of the Residential Overlay District.

Design Guidelines:

- Street trees and other plant materials within public right of way should be consistent with the Specific Plan and City Landscape Development Standards.
- Both seasonal and year-round flowering shrubs and trees should be used where they can be most appreciated – adjacent to walks and recreational areas, or as a frame for building entrances and stairs.
- Evergreen shrubs and trees should be used for screening along rear property lines, around trash / recycling areas and mechanical equipment, and to obscure grille work and fencing associated with subsurface parking garages.
- Water conservation is a high priority in the city of Ontario. Landscapes should be designed to use water efficiently, without waste, to the lowest practical amount and comply with the City’s current Model Water Efficient Landscape Ordinance. Sources for low water plants are WUCOLS, “Water Use Classification of Landscape Species” <http://www.owue.water.ca.gov/docs/wucols00.pdf> or approved equal.
- Landscape areas should be composed of living plant materials spaced approximately 2/3 to 3/4 of the mature diameter or as found in the natural environment. Non-living ornamental features (boulders, gravel, dry stream beds, etc) may comprise up to 5% of the landscape and should be a pervious material.
- Plant selection and irrigation design should be appropriate with Ontario’s regional climate (Sunset Zone 18) classified as Mediterranean, and characterized by hot, dry summers and mild winters. Winter temperatures average between 60 to 70 degrees with occasional lows in the 20’s. Summers average 75 to 90 degrees with highs exceeding 100 degrees. Average yearly rainfall is approximately 16 inches. Winds develop from the southwest averaging 6 mph. Hot, dry Santa Ana winds occur between October to March from the northeast at 30 mph with gusts at 60 mph and more. Air quality is considered poor due to frequent temperature inversions that trap pollutants below the inversion.
- In general, deciduous trees with open branching structures are recommended to ensure visibility into the development.
- The minimum mix of tree sizes and species should be provided as follows and should conform to the following minimum measurements:



Water-wise Landscape



Water-wise Landscape

Minimum Tree Quantity and Size Specifications (Palms are not included)				
Minimum on-site Trees	Size	Trunk Caliper	Height	Spread
5 %	48-inch box	3.50-inches	14 to 16 FT	7 to 8 FT
10%	36-inch box	2.50-inches	12 to 14 FT	6 to 7 FT
30 %	24-inch box	1.50-inches	9 to 11 FT	4 to 5 FT
55 %	15-gallon	1.00-inches	7 to 8 FT	2 to 3 FT

Minimum Tree Species Mix (Palms are not included)	
Number of Trees	Minimum Number of Tree Species Required
20 or Fewer	3
21 to 30	4
31 to 40	5
More than 40	6



Formal Garden



Shade-loving Plants



Orchard Planting – Agrarian Theme



Landscape Layering

5. IRRIGATION

Water conservation is a citywide goal. Efficient water use should contribute towards the conservation of this limited natural resource. Water use efficiency can be achieved by applying only the water required to and maintain the plant in a healthy condition. The project shall comply with the City of Ontario's adopted Water Efficient Ordinance and Landscape Development Standards. Maximum Applied Water Allowance, (MAWA), and Estimated Applied Water Use, (EAWU), shall be calculated and noted on landscape construction documents.

Irrigation systems should be designed to be water efficient with like plant material grouped together and proper solar orientation. Turf should be minimized and valved separately from shrub areas. Landscape areas in the shade (north or east sides of buildings) should be controlled separately from areas in the sun (south or west).

Design Guidelines:

- Whenever possible drip irrigation is to be used;
- Drip irrigation is to be used in narrow, or irregularly shaped areas, less than 8' in width.
- System is designed for recycled water if recycled -water infrastructure is expected to be installed;
- All sprinkler heads are spaced to provide 100% overlap
- Heads are to be triangularly spaced;
- Irrigation avoids runoff and wasteful overspray;
- Water schedule to correspond to evening and early morning watering times;
- All sprinklers should have matched precipitation rates;
- All sprinkler heads are equipped with pressure compensating devices, in stem, in valve or other devices are acceptable;
- All sprinklers are to be] equipped with anti-drain valves;
- Irrigation zones are separated by plant material types;
- Irrigation zones are separated by exposure and orientation;
- Irrigation system is protected by flow sensor with master valve;
- Controller is equipped with rain shut off device;
- Irrigation cycles are controlled by moisture sensors and "ET" gauge

6. LANDSCAPE PLANTING OVER PODIUM PARKING

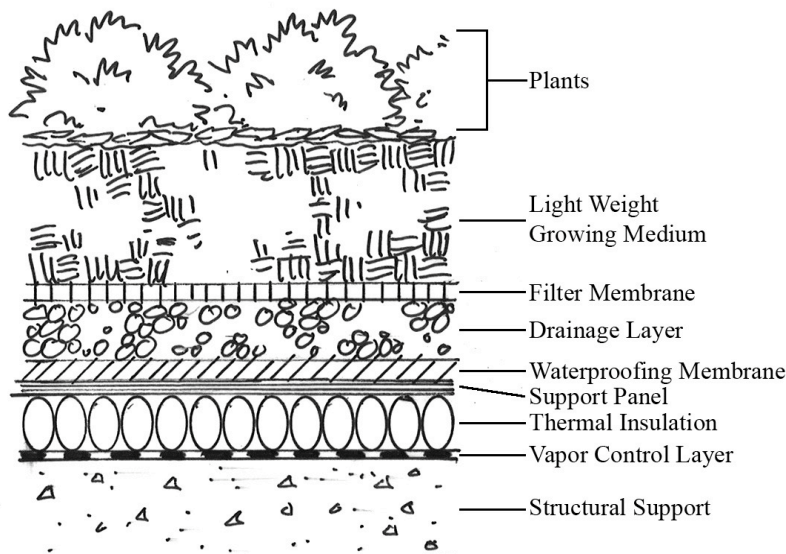
Many of the open space and common areas between the residential building units are over the garage structure. This condition requires creative roof top garden design solutions to provide pleasant, pedestrian-friendly experiences among the three to four-story urban residential buildings. Specific design criteria will be followed to accommodate landscape features over the roof structure including structural insulation; waterproofing; drainage; root barriers; irrigation; lightweight planter mix; landscaping; and site furnishings, such as barbecues, lighting, free standing pots, and signage.

Design Guidelines:

- Plantings in container pots should be used extensively, and many include small citrus/fruit tree plantings to serve as accent landscape elements and continue the agrarian theme.
- Utilize lightweight precast, glass fiber reinforced concrete, or other quality lightweight materials that replicate or complement the elements in the Guasti Interpretative Plan.
- Podium parking planter design components should be considered in the structural design systems of the garage structure and consisting of the following components:
 - Insulation layer;
 - Waterproof membrane to prevent leakage to structure below;
 - Root barrier to contain roots, to protect waterproof membrane;
 - Drainage layers, to be lightweight;
 - Geotextile or filter mat to provide separation between the soil growing medium and the insulation; waterproofing; and drainage layers;
 - Light growing medium, to provide nutrients to the plants and help with drainage;
 - Automated drip irrigation system;
 - Plants.
- Maintenance access should be considered.



*Lightweight Precast
Container Pots Over Podium
Parking*



Planter Section Over Podium Parking

7. SITE LIGHTING

Lighting in the public right-of-way and on private development should work together to create a cohesive aesthetic for the Guasti Specific Plan Residential Overlay Zone. Light fixtures should replicate or have similar character as the traditional light fixture artifacts found on the site. Lighting should be pedestrian scale, creating a pleasant and safe atmosphere in all outdoor areas.

Design Guidelines - General:

- Street lighting in the public street right-of-way shall be in accordance with the latest City of Ontario Standards and to the satisfaction of the City Engineer.
- Lighting design within public rights-of-way, public plazas, and private development should be consistent with Guasti Specific Plan and City Landscape Development Standards.
- Pedestrian oriented areas, including walkways and paths, plazas, parking lots, and parking structures should be illuminated to provide clear views both to and within the site.
- All on-site and building-mounted lighting design should be compatible with building design.
- Unnecessary glare should be avoided. Landscaping can be illuminated indirectly by concealing light features within buildings and landscaping to highlight attractive features and avoid intrusion into neighboring properties.
- Fixtures should use a reflector and / or refractor system for efficient distribution of light and reduction of glare.
- Fixtures should not cause glare or reflect into upper stories of buildings. House side shields and internal reflector caps should be used to block light from illuminating residential windows.
- Cut-off shields are recommended, to prevent light from being emitted above the horizontal relative to the light source.
- The color and finish of lighting materials should be compatible with the character of the Guasti Specific Plan and with the building architecture. Color and finish of lighting metalwork should match that of other site furnishings, and / or of the building metalwork or trim.
- Salvaged items shall be used in the historic core interpretive program and not within the Residential Overlay Zone.

Design Guidelines – Poles and Mounting Height:

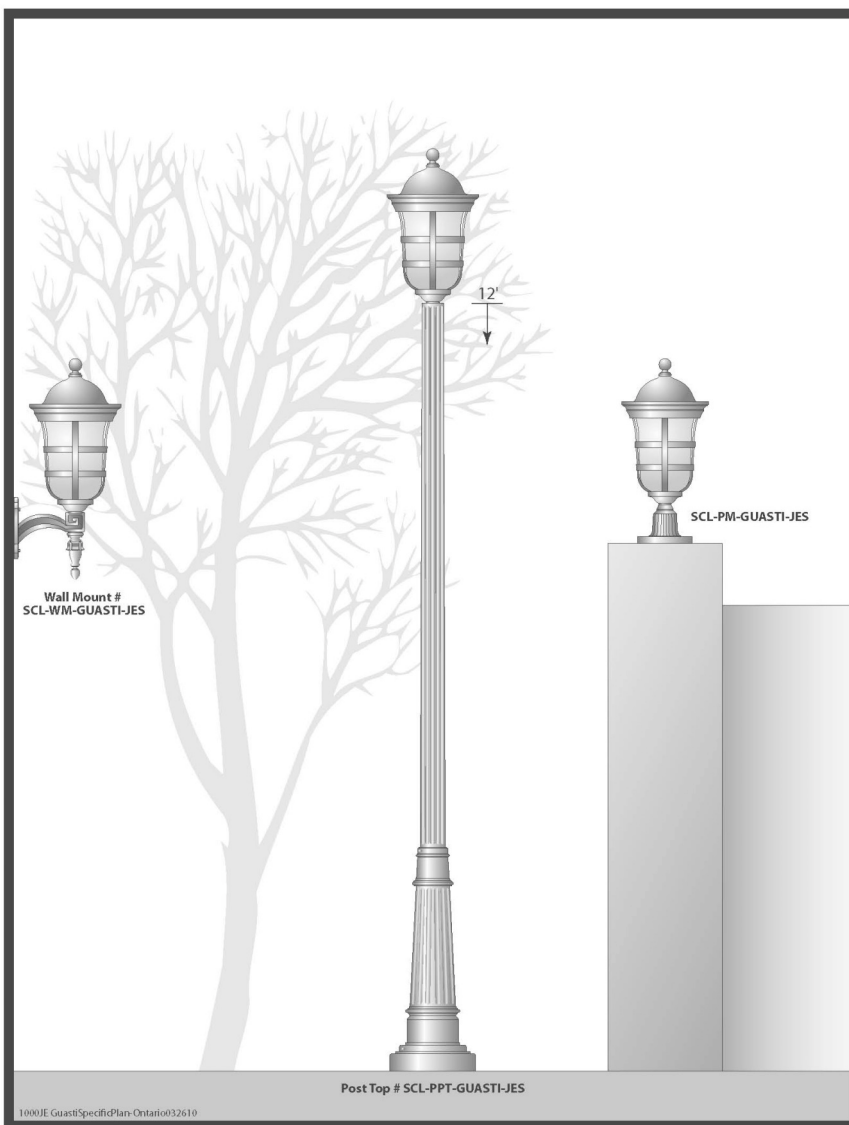
- For building-mounted lights, mounting height shall be a maximum of eighteen (18) feet, measured from the finished grade.
- For pole-mounted lighting at pedestrian plazas, walkways, and entry areas, a pedestrian-height fixture of twelve (12) to fifteen (15) feet in height from grade to light source is required. At entry, a mounting height of eighteen (18) feet to twenty (20) feet may be acceptable.
- Bollard-mounted lighting and stair lighting is also recommended for low-level illumination of walkways and landscaped areas. Bollard illumination should be shielded or kept at a sufficiently low level to prevent glare impact to passing motorists.



*Guasti Interpretive Lighting –
Theme Lighting*

Design Guidelines – Accent Lighting:

- Building façade uplighting, roof “wash” lighting, and landscape uplighting should be operated on timers that turn off illumination entirely after 2:00 a.m. daily.
- Shielding and careful placement should be used to prevent light spillage onto nearby residential dwelling windows and impair visibility for pedestrian and motorist. Adjacent to single-family homes, a combination of mounting height and luminaire shields should be used to protect residences from glare.
- Illumination levels of façade uplighting, roof wash lighting and landscape uplighting be used to lower brightness levels where illuminated facades, roofs and landscaping face residential buildings, except across wider streets with landscaped medians and street trees.



8. SUSTAINABLE LANDSCAPES

The residential landscape component of the Guasti Specific Plan should be an attractive sustainable landscape, in balance with the local climate and requiring minimal resource inputs, such as fertilizer, pesticides, and water. The landscape component should be a sustainable environment that is functional, cost efficient, visually-pleasing, environmentally-friendly and low maintenance.

Design Guidelines:

- Pervious Surfaces: Various permeable pavements should be used to help reduce the rate and quantity of storm water run-off and improve storm water quality by reducing the amount of pollutant entering the storm drain system. All permeable pavements will be ADA accessible. The following types of materials should be used:
 - Interlocking concrete pavers separated by open joint filled with small stones allowing water to flow through an open aggregate base material.
 - The garden paths should use permeable stabilized decomposed granite.
- Recycling of Construction Materials: The City of Ontario adopted Ordinance No. 2806, Sec. 6-3.602 in late 2004. The Ordinance requires all building and demolition permit applicants to submit a Construction and Demolition Recycling Plan. State law (AB 939) requires cities to achieve 50% waste diversion. The amount of waste being disposed in landfills will be reduced by using the following methods:
 - Use of new construction methods that reduce the amount of waste generated;
 - Onsite reuse of waste materials, such as concrete, asphalt, clean wood (unpainted or untreated), brick, metal, cardboard and sheet rock;
 - Job site separation of materials and delivery to a recycling processing facility;
- Landscaping: Water-wise landscape techniques should be implemented into the project.
 - Improve soil with amendments based upon agronomical soil testing and report;
 - Locating plants in the appropriate sun exposure and similar water requirements;
 - Reduce lawn area or use turf types that require less water;
 - Remove weeds that take water away from desired plants;
 - Install efficient irrigation systems and follow water-wise practices of deep, and less frequent watering;
 - Mulch planting beds to help retain soil moisture for plants reducing evapotranspiration and minimizing weeds;
 - Plants should be selected that are best suited for the local climate conditions and are drought tolerant.
 - Low-water requirement plant materials compatible with the City's water efficient landscape ordinance should be used.



Bioswale

- **Infiltration Planter Boxes:** Infiltration planter boxes should be designed to allow runoff to filter through the planter soils, capturing the pollutants and filtering them through the native soil. The planters should be sized to accept runoff and temporarily store the water in a small reservoir.
- **Vegetative Swales/Bioswales** and Depressed Landscape Areas: All landscaped parkway strips, pockets and fingers shall be finish graded at a minimum of 2 inches below top-of-curb or top-of sidewalk and all landscape areas shall additionally be depressed and designed as vegetated swales, with a cross sectional slope of 3:1 ratio, towards the center flow line, to capture 2 – year event storm water runoff flows from adjacent streets, on-site pavement areas and parking lots. The vegetated swale / bioswale will remove storm water pollutants and contaminants prior to overflowing to elevated landscaping area drains and entering the offsite storm drain system.
- **Regional/Local Material:** Locally / regionally sourced materials to reduce environmental impacts transportation should be used. Local and regional processed and manufactured materials should be specified.
- **Heat Island Effect:** In appropriate areas, canopy shade trees and, permeable pavements should be used to help reduce heat island effect by utilizing paving materials of a SRI 29 or higher.
- **Use of Recycled Material:** Site furnishings, such as benches, tables, chairs, light fixtures should specify products made from recycled plastic materials.
- **California Native and Adapted Plant Material:** California native and adapted plants to the region should be planted where applicable. These plants have evolved to live with the Mediterranean climate, and soil types. These plant materials offer several advantages:
 - Save water through lower irrigation needs;
 - Low maintenance by avoiding mowing and hedging needs;
 - Do not require fertilizer and pesticides, by local adaptation;
 - Improve water quality; plants that do not require pesticides and fertilizers reduce runoff into groundwater and the ocean;
 - Reduce soil erosion; plants with strong roots hold soils in place;
 - Attract wildlife by providing habitat and food.
- **Preservation of Existing Trees:** Existing mature trees should be preserved, based on the evaluation of the health and condition of each tree by a certified arborist.

9. LANDSCAPE MAINTENANCE REQUIREMENTS

Landscape within the Guasti Specific Plan shall be maintained to ensure water use efficiency. A regular maintenance schedule shall be submitted with the Certification of Completion. A regular maintenance schedule shall include, but not limited to;

- Routine inspection;
- Adjustment and repair of irrigation system and its components;
- Aerating and dethatching turf areas;
- Replenishing mulch; fertilizing (as appropriate);
- Pruning (at the direction of arborist);
- Weeding in all landscape areas;
- Removing any obstruction to emission devices;
- Operation of the irrigation system outside of normal watering window is allowed for auditing and maintenance;
- Repair of all irrigation equipment shall be done with the originally installed components or their equivalents;
- Overall maintenance practices shall be sustainable and environmentally-friendly;

- Landscape personnel responsible for the landscape maintenance shall be certified professionals.

Appendix: Plant Matrix

GUASTI SPECIFIC PLAN - RESIDENTIAL OVERLAY ZONE

This list represents suggested plants for different landscape areas and is subject to change based on final design and approval by the Public Facilities Development Department. Select appropriate plants for each area to meet the design intent.

Botanical Name	Common Name	Streetscape & Landscape Elements										Plant Exposure		
		New Guasti Road	Via Guasti	Turner Avenue	Blane Avenue	Project Entry & Monumentation	Common Areas & Edges	Recreation Areas	Railroad Right-of-Way	Surface Parking Lot	Green Roof / Containers	Full Sun	Partial Sun	Shade
Trees														
Low Water Use														
<i>Arbutus unedo</i>	Strawberry Tree													
<i>Brachychiton Populneus</i>	Italian Cypress													
<i>Cupressus sempervirens</i>	Coolibah Tree													
<i>Eucalyptus microtheca</i>	Goldenrain Tree													
<i>Koelreuteria paniculata</i>	Pink Melaleuca													
<i>Melaleuca nesophila</i>	Olive													
<i>Olea europaea</i>	Sweet Olive													
<i>Osmanthus fragrans</i>	Canary Island Pine													
<i>Pinus canariensis</i>	Pinyon Pine													
<i>Pinus edulis</i>	Aleppo Pine													
<i>Pinus halepensis</i>	Italian Stone Pine													
<i>Pinus pinea</i>	Coast Live Oak													
<i>Quercus agrifolia</i>	Holley Oak													
<i>Quercus ilex</i>	African Sumac													
<i>Rhus lancea</i>	California Pepper													
<i>Schinus molle</i>	Citrus													
Medium Water Use														
<i>Citrus spp.</i>	(Orange, Lemon, Fig, Loquat, Persimmon, Guava, Avocado, Plum, Kumquat)													
<i>Eriobotrya deflexa</i>	Bronze Loquat													
<i>Eucalyptus deglupta</i>	Mindanao Gum													
<i>Eucalyptus erythrocorys</i>	Red Cap Gum													
<i>Eucalyptus ficifolia</i>	Red Flowering Gum													
<i>Eucalyptus leucoxylon</i>	White Ironbark													
<i>Eucalyptus nicholii</i>	Willow Peppermint													

Plant Matrix	Streetscape & Landscape Elements										Plant Exposure			
Botanical Name	Common Name	New Guasti Road	Via Guasti	Turner Avenue	Biane Avenue	Project Entry & Monumentation	Common Areas & Edges	Recreation Areas	Railroad Right-of-Way	Surface Parking Lot	Green Roof / Containers	Full Sun	Partial Sun	Shade
<i>Eucaalyptus torquata</i>	Coral Gum													
<i>Geijera parviflora</i>	Australian Willow													
<i>Lagerstoemia indica</i>	Crape Myrtle													
<i>Pistacia chinensis</i>	Chinese Pistache													
<i>Tristania conferta</i>	Brisbane Box													
<i>Ulmus parvifolia</i>	True Green Chinese Elm													
<i>Umbellularia californica</i>	California Bay Laurel													
Palms														
Low Water Use														
<i>Phoenix canariensis</i>	Canary Island Palm													
<i>Phoenix dactylifera</i>	Date Palm													
<i>Washingtonia filifera</i>	California Fan Palm													
Medium Water use														
<i>Chamaerops humilis</i>	Medium Fan Palm													
<i>Phoenix roebelenii</i>	Pigmy Date Palm													
<i>Trachycarpus fortunei</i>	Windmill Palm													
Small Trees / Large Shrubs														
Low Water Use														
<i>Alyogyne huegelii</i>	Blue Hibiscus													
<i>Callistemon citrinus</i>	Lemon Bottlebrush													
<i>Elaeagnus pungens</i>	Silverberry													
Medium Water Use														
<i>Anisodonteia hypomandarum</i>	Cape Mallow													
<i>Feijoa selowiana</i>	Pineapple Guava													
<i>Pittosporum</i> spp.														
<i>Prunus cerasifera</i>	Purple-Leaf Plum													

Plant Matrix	Streetscape & Landscape Elements										Plant Exposure			
Botanical Name	Common Name	New Guasti Road	Via Guasti	Turner Avenue	Biane Avenue	Project Entry & Monumentation	Common Areas & Edges	Recreation Areas	Railroad Right-of-Way	Surface Parking Lot	Green Roof / Containers	Full Sun	Partial Sun	Shade
Shrubs														
<i>Bougainvillea</i> ssp.	Bougainvillea													
<i>Caesalpinia gilliesii</i>	Bird of Paradise Bush													
<i>Calliandra californica</i>	Baja Fairy Duster													
<i>Kniphofia uvaria</i>	Red Hot Poker													
<i>Lantana camara</i>	Lantana													
<i>Lavandula</i> spp.	Lavender													
<i>Rosmarinus officinalis</i> 'Tuscan Blue'	Rosemary													
<i>Rosmarinus officinalis</i> 'Prostratus'	Trailing Rosemary													
Medium Water Use														
<i>Abutilon x hybridum</i>	Flowering Maple													
<i>Brunfelsia</i> 'Floribunda'	Yesterday-Today-Tomorrow													
<i>Buxus microphylla japonica</i>	Japanese Boxwood													
<i>Buxus sempervirens</i>	English Boxwood													
<i>Carpenteria californica</i>	Bush Anemone													
<i>Coccoloba laurifolia</i>	NCN													
<i>Cotoneaster horizontalis</i>	Rock Cotoneaster													
<i>Nandina</i> spp.	Nandina													
<i>Phoridium</i> spp.	Flax													
<i>Photinia x fraseri</i>	Photinia													
<i>Platysporum</i> spp.	Tobira													
<i>Raphiolepis indica</i>	Indian Hawthorn													
<i>Raphiolepis</i> 'Majestic Beauty'	NCN													
<i>Rosa hybrids</i>	Roses													
<i>Sarcococca hookerana humilis</i>	Sweet Sarcococca													
<i>Sarcococca ruscifolia</i>	Fragrant Sarcococca													

Plant Matrix	Streetscape & Landscape Elements										Plant Exposure			
Botanical Name	Common Name	New Guasti Road	Via Guasti	Turner Avenue	Biane Avenue	Project Entry & Monumentation	Common Areas & Edges	Recreation Areas	Railroad Right-of-Way	Surface Parking Lot	Green Roof / Containers	Full Sun	Partial Sun	Shade
Groundcovers														
Low Water Use														
<i>Cistus salvifolius</i>	Rockrose													
<i>Lantana montevidensis</i>	Trailing Lantana													
<i>Lonicera japonica</i> 'Halliana'	Hall's Honeysuckle													
<i>Myoporum parvifolium</i>	Myoporum													
Medium Water Use														
<i>Coprosma</i> 'Verde Vista'	NCN													
<i>Coprosma</i> x <i>kirkii</i>	NCN													
<i>Gazania</i> spp.	Gazania													
Perennials														
Low Water Use														
<i>Agave</i> spp.	Agave													
<i>Aloe</i> spp.	Aloe													
<i>Anigozanthos flavidus</i>	Kangaroo Paw													
<i>Anigozanthos viridis</i>	Green Kangaroo Paw													
<i>Hesperaloe parviflora</i>	Red/Yellow Yucca													
<i>Kriphofia uvaria</i>	Red-Hot Poker													
<i>Stipa tenuissima</i>	Mexican Feather Grass													
Medium Water Use														
<i>Diets</i> spp.	Fortnight Lily													
<i>Digitalis lutea</i>	Foxglove													
<i>Digitalis X mertoniensis</i>	Foxglove													
<i>Dryopteris erythrosora</i>	Autumn Fern													
<i>Festuca ovina glauca</i>	Blue Fescue													
<i>Geranium</i> spp.	Cranesbill													
<i>Helictotrichon sempervirens</i>	Blue Oat Grass													

Plant Matrix	Streetscape & Landscape Elements										Plant Exposure			
Botanical Name	Common Name	New Guasti Road	Via Guasti	Turner Avenue	Biane Avenue	Project Entry & Monumentation	Common Areas & Edges	Recreation Areas	Railroad Right-of-Way	Surface Parking Lot	Green Roof / Containers	Full Sun	Partial Sun	Shade
<i>Hemerocallis</i> spp.	Daylily													
<i>Heuchera</i> spp.	Coral Bells													
<i>Liriope</i> spp.	Lilyturf													
<i>Mulenbergia lindheimeri</i>	Mulenbergia													
<i>Nephrolepis corallifolia</i>	Southern Sword Fern													
<i>Nephrolepis exaltata</i>	Boston Fern													
<i>Phormium</i> spp.	Flax													
<i>Rumohra adiantiformis</i>	Leather Leaf Fern													
<i>Senecio mandraliscae</i>	NCN													
<i>Stachys byzantina</i>	Lamb's Ear													
<i>Woodwardia fimbriata</i>	Giant Chain Fern													
Vines														
Low Water Use														
<i>Bougainvillea</i> spp.	Bougainvillea													
Medium Water Use														
<i>Hardenbergia violacea</i>	Lilac Vine													
<i>Jasminum humile</i>	Italian Jasmine													
<i>Parthenocissus quinquefolia</i>	Virginia Creeper													
<i>Parthenocissus tricuspidata</i>	Boston Ivy													
<i>Trachelospermum jasminoides</i>	Star Jasmine													