

CHAPTER 3: Design Guidelines and Standards



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CHAPTER 3 DESIGN GUIDELINES AND DEVELOPMENT STANDARDS

3.1 INTRODUCTION

Design guidelines and development standards help to ensure future development in the El Charro Specific Plan Area is consistent with the City's vision and associated goals for the area. These directives describe and illustrate design treatments that will implement the desired look and character, within the Plan Area. They shall be used as criteria both for developers when preparing development proposals, and for City staff when reviewing proposals. It is especially important that projects within the El Charro Specific Plan Area are of the highest quality and reflect Livermore's character due to the prominent western gateway location. Furthermore, as projects are phased in over time, integration of design within the site as a whole is essential for ensuring a cohesive identity for the Plan Area. El Charro will provide the City with a visual and functional district, which uses design elements such as building placement, form, materials, colors and landscape materials that compliment the City's rich rural character and viticultural heritage.

The Design Guidelines and Development Standards include both general and detailed components imperative for future development, which are relevant to site planning, building design, parking, landscaping, and location of utilities, among others. They are intended to be both specific in content, while flexible in their interpretation and application, to allow for unforeseen changes over time in design elements and in the market place. All of the design guidelines and development standards are consistent with the City of Livermore General Plan and Design Standards and Guidelines, both adopted in 2004; they provide additional design direction specifically applicable to the El Charro Plan Area. Any development in the area is also subject to all other relevant City policies, codes, and regulations. As part of the Plan adoption process, the City will amend its Planning and Zoning Code (LPZC) to include the Specific Plan Planned Development Districts.

To fulfill the goals for the El Charro Plan Area, all proposed development shall respect and incorporate the design and development guidelines and standards outlined in this chapter, as well as the policies outlined in Chapter 2 Land Use and Community Character. Section 65451(a)(3) of the Government Code of the State of California also requires that each Specific Plan include text and diagrams which specify: "Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable." These guidelines and standards indicate the minimum requirements, and developers may be required to meet additional requirements in order to meet the stated intent of the Specific Plan.

3.2 DIRECTIONS FOR USE

This chapter contains both mandatory regulations in the form of development standards (quantitative), as well as more discretionary design guidelines (qualitative), which allow some level of flexibility in achieving the City’s established objectives. The development standards for the El Charro Specific Plan Area address issues of floor area ratio (FAR), setbacks, height limits, massing, and bulk, and are further established under new El Charro zoning classifications. The design guidelines address topics such as site planning, architectural character, building materials, landscape, lighting, signage, energy efficiency, and gateways. Gateway features associated with El Charro are especially important for the City’s identity.

The use of the words “shall” and “will” indicate mandatory items, while “should” means that an action is required unless the intent is secured through other means. Words such as “encouraged” or “may” are advisory, but should be addressed and incorporated by applicants to the maximum extent feasible.

The design guidelines and development standards contained in this chapter are organized in the following sections:

- a) Site Planning
- b) Building Design
- c) Building and Site Lighting Guidelines
- d) Services and Utilities
- e) Signage Guidelines
- f) Parking Lot Guidelines
- g) Gateways and Entry Corridor Guidelines
- h) Landscape Guidelines

Other design issues and regulations not specifically addressed in the Specific Plan are established in the Livermore Planning and Zoning Code (LPZC), unless specific modifications to these standards are adopted through the PD District. If a conflict occurs between these standards and the LPZC, the standards contained in this section shall prevail.

3.3 DESIGN CONCEPT

The overall design concept for the El Charro Specific Plan Area is to reflect a strong sense of Livermore's character, drawing from its agrarian and viticultural setting, while conveying an attractive, functional and accessible retail node. As the western entrance to the City of Livermore the Plan Area will also provide a recognizable and well-designed gateway into the City, and will be a destination for City residents and its surrounding region.

The primary uses in the Specific Plan Area will be regional-serving retail stores whose design and layout will take cues from Livermore's historical character, including agriculture and viticulture traditions seen throughout the existing community. All development must be designed to:

- a) Reflect the quality and character of Livermore's 150 years of agriculture and viticulture heritage, while contributing to its thoughtful transition into a modern City in the Bay Area.
- b) Be distinguishable from neighboring communities, through use of materials and design elements indicative of Livermore's natural surroundings and high-quality of life.
- c) Enhance the I-580 Scenic Corridor and recognize this area as the main western entrance into Livermore.
- d) Foster aesthetic continuity, in part by careful selection and use of harmonious materials and complementary design elements.
- e) Minimize the potential visual impacts of parking lots, service areas, utilities, and mechanical equipment.
- f) Create a vibrant retail center with an authentic character, void of overly themed or exaggerated design concepts.

Design guidelines and standards specific to commercial uses within the El Charro Specific Plan Area address primarily building exteriors and their relationship to the public realm. Decisions regarding buildings must consider and balance programmatic needs, economic constraints, functionality, aesthetics, and environmental impacts.

3.4 SITE PLANNING

The site planning guidelines for El Charro provide direction for the general layout of each parcel and how land uses fit within the larger context of the Specific Plan Area. The site design is planned to be efficient, convenient, and safe for vehicular and pedestrian circulation, support rational and cohesive form, and provide attractively landscaped frontages and external areas. Effective site planning will establish a strong framework for guiding future individual development projects as they are phased in over time.

The Plan Area's street network and block pattern should provide convenient connections, promote functional development areas, avoid monotony and repetitiveness, and be oriented to frame views of the visual amenities of the area, to the extent possible. Distinctive places should be created through interesting spaces between buildings, variations in building footprints, circulation patterns, vehicular and pedestrian friendly street widths, and building setbacks. In addition, the development pattern of El Charro should be designed to provide the optimum visual access to the distant hillsides, and the more immediate arroyo vegetation, planned vineyard buffer, and City open space areas.

3.4.1 Floor Area Ratio

Floor area ratio (FAR) dictates the amount of developable building space allowed as a fraction of a total parcel area. Within the maximum height limits across the Specific Plan Area, development can be designed in a variety of configurations to meet required FARs. For example, a 0.25 FAR would allow a one story building that occupies one-quarter of the property area or a two-story building whose footprint occupies one-eighth of the parcel. The FAR guidelines for the Specific Plan Area help direct development intensity to align with the desired character for El Charro, as outlined below:

- a) Properties designated for development within the Specific Plan Area are permitted building intensities of 0.3 FAR. Each property will be evaluated based on this standard. The overall traffic impact from development within the Specific Plan Area has been evaluated under the EIR using a 0.3 FAR as a maximum potential development yield.

3.4.2 Site Layout

A number of unique site conditions direct the site layout for many of the properties. Height limit restrictions imposed by the Scenic Corridor constrain building placement and height along the northern edge of those properties adjacent to I-580. Views of the surrounding hills must not be obstructed by buildings located directly south of I-580, to the extent possible. Precise building placement shall be determined through formal Scenic Corridor analysis for individual projects.

A fiber optic cable runs underground through the Plan Area within a 20-foot wide easement. The easement runs from the western boundary to the eastern boundary and must be preserved along the entire route in order for maintenance and repairs to occur. Therefore, no buildings or permanent structures shall be placed within this easement. For additional information refer to Figure 1-4 in Chapter 1, which illustrates the existing development constraints impacting the Plan Area.

The following general site layout guidelines are encouraged within the Plan Area:

- a) Clustering of development on each property is encouraged to promote walkability and create publicly accessible open spaces.

- b) Development on adjacent properties should look for opportunities to establish vehicular and pedestrian connections between sites in order to encourage convenience, synergy, and efficiency among the retail areas.
- c) Properties will be visible from all angles therefore building placement must be carefully considered to shield more utilitarian components from the most prominent viewsheds. Surface parking, loading and trash areas, and utility boxes must be well-designed to compensate for the lack of protection typically provided by a concealed rear building area.
- d) Adjacent commercial properties, or proximate tenants within properties, should coordinate shared facilities, including pedestrian plazas, walkways, driveways, and parking areas.

3.4.4 Pedestrian and Public Spaces

Pedestrian friendly design elements will be incorporated throughout the Plan Area, not only in public open spaces but also as part of each retail development, its surrounding parking lots, and street crossings. Small plazas, formal and informal gathering spaces and amenities catering towards pedestrians are encouraged in order to create human-scaled interest and an inviting nature. The following pedestrian and public space design elements are encouraged within the Plan Area:

- a) Pedestrian paths should be safe, attractive and inviting and should provide direct connections between uses and places.
- b) Buildings or building clusters should include informal, visible and accessible plazas and outdoor gathering areas amongst the retail uses for outdoor dining and relaxation.
- c) Benches should be installed in proximity to entrances and/or landscaped areas, so as not to impede pedestrian access or circulation. Bench placement and orientation should be used to clarify the public or private nature of the amenity.
- d) All street furniture should be consistent and complementary with the architectural style and quality of the surrounding buildings. Street furniture includes benches, lighting, bollards, waste receptacles, and other objects or structures installed on sidewalks and streets.
- e) Water features are encouraged in visually prominent or otherwise “special” locations, contributing to the area’s overall character. These elements can range from formal fountains to enhanced stormwater management facilities, such as bioswales or detention facilities. Features that serve a dual purpose as stormwater drainage and a public amenity are also encouraged.
- f) Sculptural elements are encouraged in appropriate public areas, such as courtyards or plazas, and should enhance rather than conflict with the building and site design. Development should consider coordinating with the Cultural Arts Commission on providing a permanent space for public art installations.

3.4.5 Building Setback

Building setbacks indicate the distance between the outer edge of the building façade and the property line, or to the edge of the public right-of-way (the build-to line). Minimum setback regulations that allow for an appropriate range of articulation help ensure visually interesting corridors within individual developments, while also creating consistencies and linkages between the different projects. Even though most buildings will be one or two stories, purposefully coordinated setbacks help ensure a pedestrian friendly, human-scaled environment by creating attractive and interesting spaces and well-defined sidewalk edges that provide strength of form and accommodate appropriate landscaping. Figure 3-1 depicts images with the desired range of setbacks and site planning examples envisioned for the El Charro Plan Area. General and specific setback requirements for the Plan Area are indicated below.

1. General Requirements

- a) Modest variations in building setbacks are encouraged to help create visual interest and an atmosphere that is attractive and inviting to patrons. Variations along facades with multiple tenants draw patrons through shopping corridors.
- b) Exceptions to building setbacks discussed under this section, include buildings with outdoor public plaza spaces, outdoor dining and wider public walkways.

2. Scenic Corridor Setback

Interstate 580 is designated as a Scenic Corridor through the City of Livermore. Additional restrictions regarding building placement and height have been assigned to the corridor in order to preserve views throughout the City. Building heights in the Specific Plan Area are determined using a view angle of 2.2 degrees, starting four feet above the southern edge of the eastbound right-hand lane on I-580, as depicted in Figure 3-2. View angles are taken perpendicular to the interstate, and the allowable height of buildings progressively increase as you move southward across the Plan Area. For example, in most cases along the corridor, a 20-foot tall building may not be closer than approximately 290 feet south of the edge of I-580 (see Figure 3-2).

As mentioned previously, the General Plan Amendment allows for limited projections into the 2.2-degree view angle. This flexibility is necessary to ensure architectural amenities appropriate in this I-580 gateway to the City; and to allow building heights for one institutional use (Crosswinds Church) proposed on a parcel with significant site constraints. The intent is to achieve a balance between allowing attractive gateway architecture and preserving views of distant ridgelines. When seen as a cohesive district, viewers will discern a layered landscape, with foreground views of vineyards, trees, shrubs, parking and streets, middle ground views of buildings, and background views of hills and windrows of trees in the distance.



Benches should be installed in proximity to entrances and/or landscaped areas, so as not to impede pedestrian access or circulation. Bench placement and orientation should be used to clarify the public or private nature of the amenity.



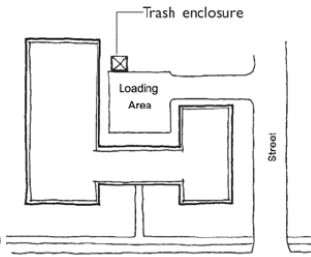
Parcels designated for development within the Specific Plan Area are permitted at building intensities of 0.30 FAR. Large areas of surface parking should be divided into smaller components to decrease visual impacts, and to facilitate safe and efficient pedestrian circulation.



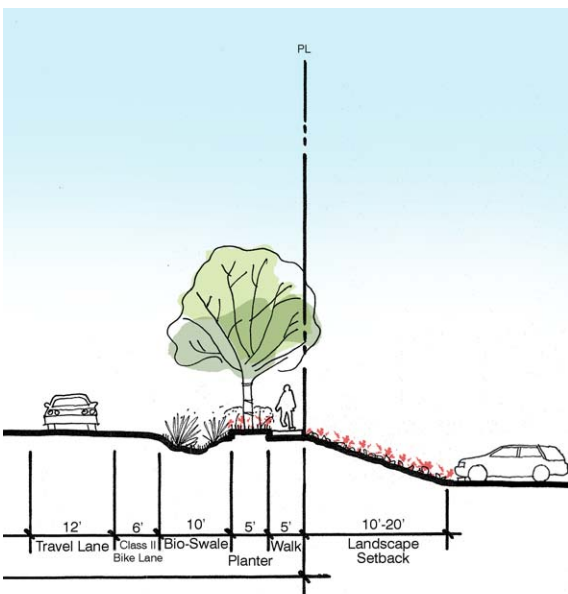
Buildings should be setback a minimum 30' from all major streets (20' from property line) and 20' from all minor streets (10' from property line) or along entry drives to allow for appropriate landscaping and screening.



Surface parking, trash loading areas, and utility boxes must be well-designed to compensate for the lack of protection typically provided by a concealed rear building area.



Screening of trash enclosures and loading areas should be integrated into site design and shielded from parking and street frontage areas when possible.



Setback area shall include landscape elements to enhance the development and assist in screening parking lots and building utilities. Buildings and parking lots shall have a minimum setback of 10' for minor streets and 20' for major streets. Along Jack London Boulevard, a bio swale will serve as an additional landscape buffer.

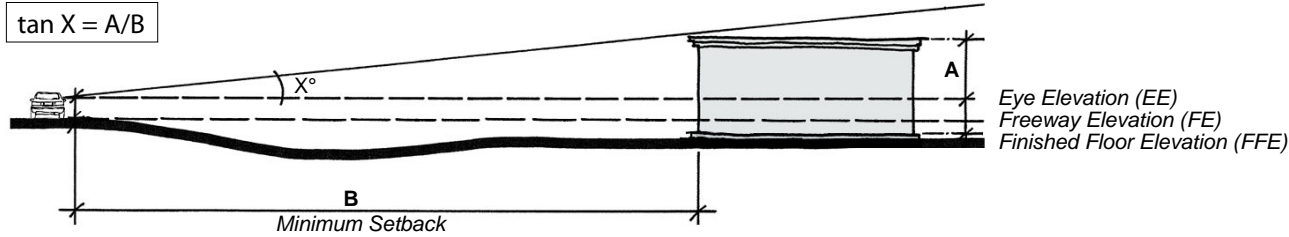


Small plazas, formal and informal gathering spaces and amenities (such as outdoor eating areas seen above) catering towards pedestrians are encouraged throughout the Plan Area to create human-scaled interest and an inviting pedestrian environment.

Figure 3-1 Site Planning
CITY OF LIVERMORE EL CHARRO SPECIFIC PLAN

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Calculation for Scenic Corridor Setback and Height Dimensions



$$\tan X = A/B$$

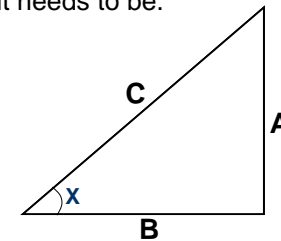
A = Building Height - (EE-FFE)

A = (TAN X) B

Use this when you know the building location (distance from freeway and elevation) and want to know how tall it can be.

B = A / TAN X

Use this when you know the height of the building and want to know how far from the freeway it needs to be.



Sources for Elevation and Distance Information:

- Freeway Elevation (FE): City, Qualified Consultant or Applicant's Civil Engineer
- Eye Elevation (EE): City, Qualified Consultant or Applicant's Civil Engineer
- Building Pad Elevation: Applicant's Civil Engineer
- Finished Floor Elevation (FFE): Applicant's Civil Engineer and Architect
- Distance, Fwy to Building: City, Qualified Consultant or Applicant's Civil Engineer
- View Angle: General Plan

Sample Calculation for a 20' and 35' Building Height

Building 1 - Calculation to find a minimum setback dimension

$$\begin{aligned} \tan x &= A/B \\ B &= A/\tan x \\ &= 11.2'/\tan 2.2^\circ \\ &= 11.2'/0.038416 \\ &= \mathbf{291.5' \text{ Min. Setback}} \end{aligned}$$

Building 2 - Calculation to find a maximum building height dimension

$$\begin{aligned} \tan x &= A/B \\ A &= (\tan x) B \\ &= (\tan 2.2^\circ) 682' \rightarrow 26.2' + 8.8' \text{ (difference in elevation between finished floor and eye level)} \\ &= (0.0384) 682' \\ &= 26.2' \\ &= \mathbf{35' \text{ Max. Height}} \end{aligned}$$

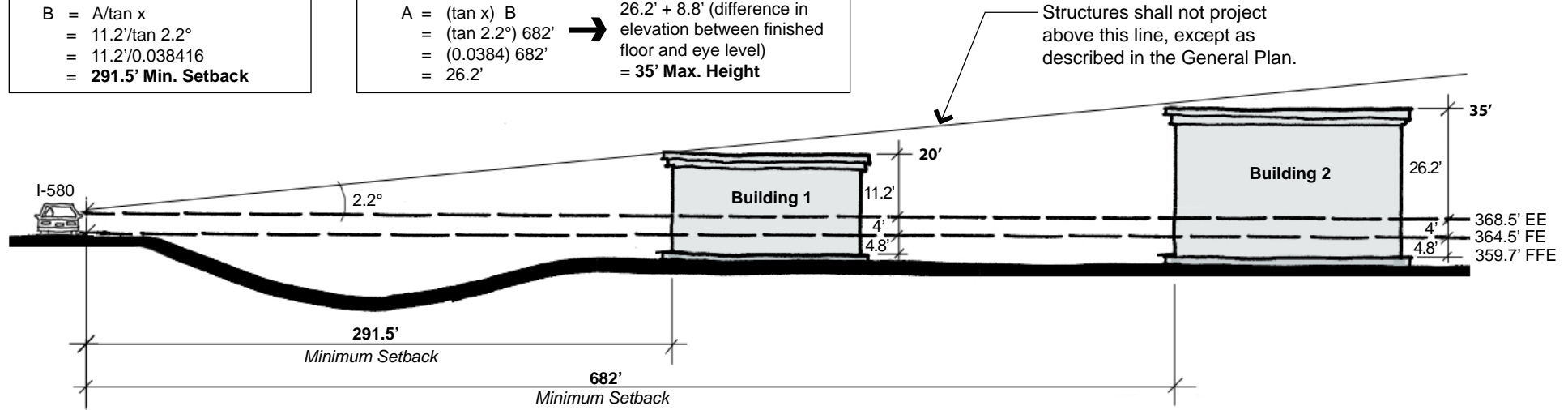


Figure 3-2 Scenic Corridor Building Heights
CITY OF LIVERMORE EL CHARRO SPECIFIC PLAN

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3. Fiber Optic Easement Setback

- a) Buildings may be built up to the edge of the fiber optic easement, but appropriate access for operation and maintenance must be provided.
- b) Thoughtful setback variations should be used to create a pedestrian environment that facilitates an active commercial area and reflects the high-end quality retail development envisioned throughout this area.

4. Street Setbacks

Building setbacks from public streets shall be as herein. All required yards adjacent to streets shall be landscaped except for driveways and sidewalks, which are found to be necessary for the efficient use of the property.

- a) *Major Street Setback*
 - i. Buildings and parking lots should be setback a minimum 20 feet from the property line along all major streets (Jack London Boulevard and El Charro Road) to allow for appropriate landscaping and screening.
 - ii. Setback area shall include sidewalks and landscape elements to enhance the development and assist in screening parking lots and building utilities. Setback area may be adjusted to accommodate bus stops.
- b) *Minor/Entry Street Setback*
 - i. Buildings and parking lots should be setback a minimum 10 feet from from the property line on all minor streets or along entry drives to allow for appropriate landscaping and screening. On Freisman Road, the minimum setback shall be 20 feet.
 - ii. Setback area shall include sidewalks and landscape elements to enhance the development and assist in screening parking lots and building utilities. Setback area may be adjusted to accommodate bus stops.

5. Internal Setbacks

- a) There is no minimum internal property line setback requirement.

3.5 BUILDING DESIGN

Buildings shall be high quality, attractive, and interesting, and provide a positive environment for visitors and passers-by alike. The overall El Charro design concept encourages compatibility among the various developments and building types, in part achieved through use of complimentary

materials, finishes, and colors. A certain amount of flexibility is also desired to promote individual expression and identity, and allow for evolving trends.

The architectural character of this area must appeal to viewers at both the micro and macro level, with architectural detailing oriented toward pedestrians and more substantial design elements noticeable from the various surrounding roadways, including I-580. These significantly different visual perspectives are equally important to the success of individual sites and the El Charro Plan Area as a whole; design considerations must be made accordingly.

The El Charro Plan Area will echo the City's established agricultural, rural, and viticulture heritage and character through its building design. Cues guiding design should reflect the surrounding context; the attractiveness recognized in the more rural areas of Livermore is defined as elegant, simple, void of excessive detailing and ornamentation, and appropriate to the area's climate and topography. Architectural interest is also derived from unique window and roofline configurations and identifiable building entries, all of which should be used throughout the Plan Area.

The following standards represent the City's minimum architectural standards within the Plan Area; although, applicants are encouraged to pursue the most innovative designs and highest-quality materials feasible. Figure 3-3 Building Design, illustrates building design images that reflect the City's character and intent for the Plan Area.

3.5.1 Building Orientation

Building orientation standards ensure placement that is welcoming for visitors and employees, has clear entrance delineations, complements building form, and allows for implementation of energy saving technologies. Guidelines directing building orientation for the El Charro Area include:

- a) Building entries, public areas, and other façades shall be oriented towards adjacent streets or walkways, creating an atmosphere that is inviting to pedestrians.
- b) Relationships between multiple developments, whether they are all on the same property or on an adjacent property, should be respected.
- c) Building placement should capitalize on the surrounding scenic amenities to help create a sense of place. Buildings should be oriented to afford view corridors to the surrounding open space, arroyo environment, and distant hills and ridgelines. Not only can view corridors be created along the edges of the buildings or sites, but they can be created through corridors created between buildings or from within developments looking outward.
- d) All developments, where feasible should be solar oriented to capitalize on renewable energy, with the longest building sides facing southward; the east-west alignment of the fiber optic cable facilitates this ideal development pattern, if clustering of development is used.



Variation in roof heights.



Siting of public area with façades that are oriented towards walkways.



Architectural variation and integration of pedestrian connections.



Varying rooflines, roof heights, and vertical planes reduce monotony and bulk, and create visual interest.



Single buildings containing multiple tenants with articulated façades that convey a sense of individual storefronts to viewers.



Rooflines should be designed to reflect the local character of Livermore and highlight the prominence of the City gateway. Variation in style, pitch, materials, and color are encouraged.

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3.5.2 Building Height

Maximum building heights are established to ensure that development is appropriately scaled and sized according to the City's vision, as well as its functionality. In addition, the area's proximity to the Livermore Municipal Airport and location within a scenic corridor requires supplementary height restrictions for safety and visual quality. Height development standards established in the Specific Plan are controlling, and supersede height standards established by the Livermore Planning and Zoning Code. These standards include:

- a) Structures shall not exceed 40 feet, except structures on the Prime property may be up to 50 feet in height, consistent with the General Plan.
- b) As part of the development design review process, all structures should be reviewed to ensure consistency with the Scenic Corridor policies.
- c) Building heights are determined using a view angle of 2.2 degrees, starting four feet above the southern edge of the eastbound right-hand lane on I-580, as depicted in Figure 3-2. View angles are taken perpendicular to the interstate, with allowable building heights progressively increasing southward across the Plan Area. Building heights shall be measured from the median grade elevation to the tallest peak of the associated roofing structure. However, the following exceptions apply to the Prime Outlet Livermore Valley project site and the Church/Institutional use on the Children's Hospital Site:
 - i. Prime Outlet Livermore Valley Site: Development within this site may exceed the 2.2 degree view angle if all the following conditions are met:
 - A 50-foot height limit for all structures as noted below;
 - Ninety percent of projections into the view plan shall be 13 feet or less;
 - Ten percent of projections into the view plan may be 25 feet or less;
Projections into view plane shall encompass an area of no more than 0.6 percent of the site area;
Projections into view plane shall have a total of no more than 21 percent of the site frontage.
 - ii. Children's Hospital – for a church or institutional use only: Development within this site may exceed the 2.2 degree view angle if all the following conditions are met:
 - A 40 foot height limit for all structures;
 - 100 percent of projections into the view plane shall be 15 feet or less;
Projections into view plane shall encompass an area of no more than 2.6 percent of the site area;

- Projections into view plane shall have a total of no more than 20 percent of the site frontage.
- d) Exceptions to these height restrictions may be granted through a General Plan Amendment and/or a Specific Plan Amendment.

3.5.3 Building Entries

Building entrances should be clearly defined and accessible, in order to promote a welcoming environment that is comfortable for first-time visitors and long-term employees. Entrances should reflect the following guidelines:

- a) Primary entrances should be obvious, and face either streets or pedestrian paths.
- b) Massing, lighting, architectural details (porticos, canopies, arcades, and plaza entries and courtyards), and landscape treatments should be employed to help distinguish the entry from the rest of the building.
- c) Entryways should contain substantial front doors and enhanced hardscape foregrounds, potentially setback up to six feet from the rest of the building to create a transitional space. Such spaces should be open and well lighted to maintain security.
- d) Buildings whose primary entrance fronts onto a pedestrian path may have secondary entrances oriented toward parking areas.
- e) Mid-box retail development that is oriented toward a parking lot must provide equal access and amenities to pedestrians and drivers, incorporating clearly delineated walkways. Mid-box retail is defined as typically occupying space in the range of 25,000–45,000 square feet, and may include electronics, home improvement, book/music stores, and department stores. The allowable square footage range of 1,500 to 150,000 will accommodate this range.

3.5.4 Articulation of Building Façades

Implementation of the following standards will contribute to the goal of varied and visually interesting buildings, site design, and overall character, together intended to further enhance the pedestrian experience.

- a) Long, flat unarticulated building façades and blank walls, exceeding 20 feet are not permitted on any building face. Building façade changes can include the use of columns, trellis, landscape features, horizontal and vertical plane changes, and use of windows and doors.
- b) At least 50 percent of any front (main entrance) façade must include storefront, transom, or display windows or doors; no section should extend 20 linear feet without variation.

- c) All other building facades must not have blank sections longer than 30 linear feet, and should incorporate design elements, such as windows, doors, decorative materials or vertical elements such as columns.
- d) False windows and doors are discouraged.
- e) Articulation should be achieved (in addition to varying setbacks) with a change of materials, color, finishes, pattern and size, façade plane, vertical plane, building height, special building entrance, arcades, and relief elements.
- f) Façade recesses and projections, entry elements, wall plane layering, and three-dimensional detailing are encouraged to cast shadows, and create visual relief and interest.

1. Multiple-Tenant Spaces

Single buildings containing multiple tenants need to follow the requirements listed above and should include articulated façades that convey a sense of individual storefronts to viewers, whether it is a drive-by motorist or pedestrian in close proximity. The following design elements may assist in achieving this:

- a) Columns, piers, or pilaster placed between building bays.
- b) Vertical slots or recesses applied between building bays.
- c) Recessing storefront entrances between six and ten feet, creating a transitional space for pedestrians.

3.5.5 Roof Forms

Roof forms contribute to the visual interest and overall design statement of a building. Within the El Charro Plan Area roof forms take on an unusually important role due to the visibility of the area from surrounding public streets, and specifically I-580. Strong roof forms should be informed by simple, agrarian elements similar to those found on barns or old winery buildings. The following design guidelines will assist in creating visual interest:

- a) The form, texture, materials, color, mass, and volume of the roof should be integrated with the overall building design and character.
- b) Building articulation should be implemented through varying rooflines, roof heights, and vertical planes to reduce monotony and bulk, and create visual interest. This concept can be applied to larger, connected shopping center structures, effectively creating desired development variety.
- c) Where applicable, as determined through City review, a hierarchy of roof forms shall be used.

- i. Key locations, such as building entries, must have a full roof form, rather than a false front.
 - ii. Roof forms, other than flat roofs, on larger buildings may not always span the entire building depth, as it may prove impractical for these structures. The roof form used must be visually substantive and not appear to be tacked on.
- d) Stand-alone flat roofs that are not incorporated into a larger design scheme with varying roof forms are prohibited. Acceptable flat roofs must include decorative elements such as parapets, cornices or other horizontal bands of authentic materials; foam trim is discouraged.
- e) Roofs within the Plan Area should contain pitches between 4:12 and 6:12 rise over run as found on many of the structures built in Livermore in the early 20th century; pitch should not exceed 8:12.
- f) Mechanical equipment located on rooftops shall be screened from view by use of roof forms. Stand-alone mechanical screens are prohibited.

3.5.6 Building Massing

In order to achieve the goals and vision for the El Charro Area as a high-quality, walkable environment, it is essential that building massing be designed to be “human-scaled” and visually interesting. The following development standards will help frame the massing of the buildings within the Plan Area:

- a) Multiple buildings developed on the same property should be positioned with an apparent hierarchy, with secondary structures arranged to appear subordinate in form and scale.
- b) Building sizes should be designed as flexible as possible to accommodate growth and change.
- c) Larger buildings with multiple tenants should be deconstructed into smaller, articulated components that relate to the pedestrian scale.
- d) Variations in massing should be especially concentrated along prominent edges or corners of shopping center structures to create interest that attracts visitors to the development; in part achieved by adding smaller components to major structures.
- e) Building masses shall be emphasized in key nodes, such as primary automobile and pedestrian areas, near key intersections, and as appropriate to highlight major retail tenants.
- f) Spaces between buildings should be used for pedestrian plazas, courtyards, and other outdoor gathering areas to avoid “dead” spaces.
- g) Architectural elements and details (arcades, garden walls, berms, etc) enhance massing articulation, but should be appropriately scaled to the primary structure.

- h) Where consistent with the Scenic Corridor, second stories or vaulted areas are encouraged to diversify massing, and provide amenities such as upper-floor terraces and transoms that allow light and air to the lower levels.

3.5.7 Building Elements

In addition to the overall structure of a building, many smaller elements create the overall feel and composition of a building. These elements include windows, doors, operational equipment, awnings, and decorative lighting. The following outlines specific requirements for a range of building components:

- a) Window scale, proportion, material, and color should reflect and enhance a building's character and quality.
- b) Windows should be authentic and functional to the extent feasible.
- c) Reflective or domed skylights are not permitted.
- d) All mechanical equipment (fans, pumps, vents, etc) shall be incorporated into the building design, and consolidated and concealed from public view.
- e) Mechanical equipment physically separated from buildings should be screened in a manner consistent with the surrounding architectural character and kept clear of pedestrian ways.
- f) Foundation walls must not exceed 24 inches above grade, and anything above 12 inches must be covered with wood, stone, finished stucco, or painted with acceptably colored masonry paint.
- g) Overhangs and awnings are encouraged to provide shade and sense of enclosure to enhance the pedestrian experience.
- h) Active and passive solar applications are encouraged when integrated within the form and context of the roof design and associated materials.

3.5.8 Architectural Detailing

Visual interest is dependent on well-designed and constructed architectural detailing. It helps secure unity and harmony within the projects as well as within the Specific Plan Area. These details typically occur where one surface or material meets another (window meets a wall, etc.) and are found within all building elements. Architectural detailing guidelines include:

- a) Relaying a consistent style across a single building, or across multiple buildings in the same development. Certain details can carry through the entire Specific Plan Area. Details should include:
 - i. Use of natural and other high quality materials, such as stone and wood planks.

- ii. Similar or complementary roof forms.
 - iii. Awnings and trellises to provide shade and protection for pedestrians.
 - iv. Appropriate landscape and lighting design.
- b) Agrarian materials, such as steel beams, iron works, or copper plating, can be used to accent and animate the area's character, especially as they are reflective of Livermore's agrarian history.
 - c) Accent treatments and materials used on primary elevations should be continued on any elevation visible to the public.

3.5.9 Building Materials

High quality building materials contribute greatly to the overall character and quality of development, and are essential to creating first-rate environments of lasting value and appeal. Building materials add texture and richness to the pedestrian environment, and contribute to a high quality development pattern as much as architectural design.

Since the Plan Area forms the City's western gateway it elevates the importance of its appearance beyond the already high levels found throughout Livermore. Careful attention to material choice and use is required in order to avoid monotonous landscapes; unique solutions are preferred to unconsidered applications of conventional palettes. As shown in Figure 3-4, multiple materials can be used in combination to create a cohesive style with appropriate levels of variation. Below are some examples of materials that will be encouraged:

- a) High-quality, authentic building materials, consisting of, but not limited to architectural concrete, natural stone, masonry (brick, tile, glass blocks), architectural quality metals, and wood, are preferred.
- b) The use of recycled, local, and rapidly renewable materials are encouraged. For example, environmentally sound technologies that utilize concrete to mimic wood siding can be preferable to actual wood.
- c) High-quality metal detailing or vernacular styling is encouraged; such as corrugated tin roofs reminiscent of barn roofs.
- d) Combinations of these materials are encouraged for interest, but should be indicative of the architectural style and a consistent design strategy; all material use shall be subject to development and design review.
- e) Reflective and dark-tinted glass is prohibited.

Materials: High-quality, natural materials (such as wood and stone) enhance architectural design and enhance a project's long-term viability; local, renewable, and recycled materials (please see lower right image of recycled pavers) that emulate natural materials are preferred.



Pavement made from recycled tire rubber.

Variety: Projects are encouraged to combine materials and colors for interest; certain man-made materials may be used in these circumstances.



Character-Building: Materials reflective of Livermore's agrarian and viticultural past and present are encouraged.



Photos above courtesy of the Livermore Heritage Guild (Source: City of Livermore, 2006)

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- f) Appropriate exterior wall materials should be used equally on all façades, not just the ‘front’ of buildings, given the visibility of this area as the City’s gateway and its proximity to major arterials.
- g) Exterior detailing should complement the materials and colors of façades of the overall building style, and provide texture.

3.5.10 Color

Color schemes must be carefully considered to be appropriate to the type and character of the development, and the Plan Area as a whole. Development within the Plan Area shall implement the following guidelines pertaining to color:

- a) Use rich earth tone palettes of varying depths that are reflective of the natural environment. Specifically, exterior walls shall consist of natural tones ranging from off-white to black to brown and tan, including muted yellows, oranges, greens, and reds, with certain saturated burgundies, deep browns, and olive greens being used for accents areas.
- b) Primary and pastel colors are prohibited.
- c) Color palettes should be adjusted slightly from site to site to avoid monotony, differentiate uses, and define a more fine-grained retail character.
- d) Reflective finishes and shiny exteriors are not permitted.

3.5.11 Energy Efficiency/Green Building Guidelines

The City encourages energy efficient techniques be incorporated into all new development, and promotes the further use of green building techniques. This is especially important for the El Charro Specific Plan Area due to both its prominent location at the City gateway; and, because of the significant amount of building and traffic that is anticipated because of this development. Water and power conservation can be achieved through a variety of design and engineering techniques, reducing utility costs for tenants and the City, while improving the overall environment for visitors and the Specific Plan Area.

3.6 BUILDING AND SITE LIGHTING

Lighting is important for creating a safe and secure environment. It also serves as decorative elements to enhance the appearance of buildings and reinforce the area character. Lighting within the El Charro Specific Plan Area should be consistent and uniform; incorporating the following recommended lighting standards. Please refer to Figure 3-5 Lighting and Signage, for lighting and signage examples applicable to the Plan Area.

3.6.1 General Lighting Guidelines

- a) Street lighting shall be provided along all streets and within all parking and loading areas to provide illumination for security and safety.
- b) Pedestrian pathways and public areas shall be provided with adequate lighting.
- c) Lighting must be designed with cut-off shields to minimize light spread and off-site glare; protecting the dark skies and nighttime views in the area is required by the City's General Plan night sky policies. Lighting shall be consistent with airport operations and requirements.
- d) All lighting shall be directed downward.
- e) The maximum allowable site lighting level is a 50-foot candle (f.c.); with allowances for up to 75 f.c. in front display areas for uses with authorized outdoor display.
- f) The maximum light pole height for standards on private property shall not exceed 23 feet.
- g) The maximum light pole height for City streets shall not exceed 30 feet.
- h) Outdoor lights that blink, flash, or change intensity are not permitted.
- i) High energy efficiency, long life lighting alternatives should be incorporated throughout the Plan Area. All lighting types are subject to City review and approval.
- j) Externally illuminated signs must be positioned so that light does not shine directly on adjoining properties, and must be shielded to prevent glare.

3.6.2 Illumination of Buildings

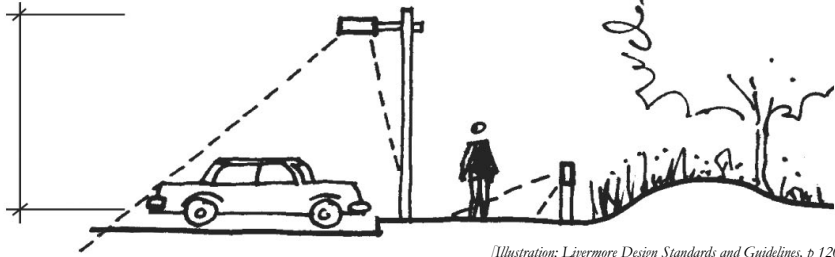
- a) Security light fixtures shall not project above the fascia or roofline of the building.
- b) Exterior building lighting shall be used to reinforce the architectural design, with emphasis on entries, landscaping elements, major architectural features, etc. The use of uplighting to accent interesting architectural features is encouraged, although luminaries must be low wattage spotlights to reduce glare and light pollution.

3.6.3 Illumination of Street

- a) Intersection and street lighting along Jack London Boulevard should not exceed 30 feet, along those areas adjacent to development.
- b) Sections of Jack London Boulevard that are adjacent to open space, rural and airport areas shall not provide street lighting.
- c) Other public streets within the Plan Area, adjacent to development shall have street lighting, not to exceed 30 feet.
- d) Street lighting will be provided in the median, along those streets where the median width permits.

Dark Skies: Lighting standards have been established in part to minimize light pollution and glare that compromise the area's dark skies, while maintaining adequate levels of safety and security within all development.

Maximum Height 23'



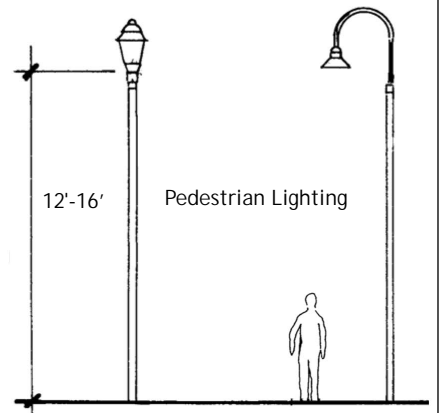
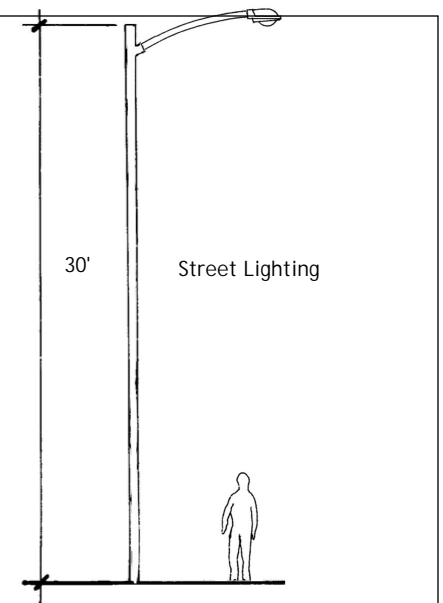
[Illustration: Livermore Design Standards and Guidelines, p 120]

Lighting designed for downward direction



[Photos: Livermore Design Standards and Guidelines, p 120 and 122]

Aesthetics: Light fixtures should complement associated architecture, and are encouraged to be simple in design to reflect the local character.



[Illustration: South Livermore Valley Specific Plan, p 9-34]



Gateway Signage



Freestanding monument sign



Directional signage and decorative awnings



Wall-mounted signage



Projecting wall signage and a coordinated signage plan.

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3.6.4 Illumination of Parking and Loading Areas

- a) Pole light fixtures in parking areas shall not exceed 23 feet in height.
- b) Service area lighting shall be contained within the associated area.
- c) High pressure sodium lighting fixtures shall be used.
- d) Minimum lighting levels shall be 1 f.c., with a maximum of 2 f.c.
- e) Open-air parking lot lighting shall not cause direct illumination on adjacent and nearby properties or streets. Fixtures should be of a type or adequately shielded so as to prevent glare from normal viewing angles.
- f) In order to direct light downward and minimize the amount of light spilled into the dark night sky, all lighting fixtures serving open-air parking lots shall be full cut-off fixtures as defined by the Illuminating Engineering Society of North America (IESNA)

3.6.5 Illumination of Landscaping

Lighting should be coordinated to enhance the area landscaping, especially in regards to trees; light standards shall not rise above tree canopies such that the trees keep occupied spaces in shadow from the lighting.

- a) The use of uplighting to accent landscape features is encouraged, although luminaries must be low wattage spot lights to reduce glare and light pollution

3.6.6 Illumination of Walkways and Public Spaces

- a) Light standards ranging from 12 feet to 16 feet in height shall be used throughout the interiors of the project area to illuminate all sidewalks and connecting walkways.
- b) Minimum lighting levels between destinations shall be generally 1 f.c., with a maximum of 2 f.c.
- c) Lighting design shall be in keeping with the simple agrarian style of the development; ornate or period lighting styles should be avoided.
- d) Bollard style lighting of major pathways is required.

3.6.7 Illumination of Recreational Facilities

- a) No outdoor recreational facility, public or private, shall be illuminated from 11pm to sunrise, except to conclude a specific recreational or sporting event or similar activity, which was in progress prior to 11 p.m. (lighting must be turned off no later than one hour after the use is over).

3.7 SERVICES AND UTILITIES

All development within the Plan Area must be designed to accommodate delivery and loading zones, trash disposal, and spaces that hold transformers. Most, if not all, buildings within the Specific Plan will be viewed from all sides. Therefore, service areas for loading trash collection, utility pads, etc. must meet their fundamental needs while contributing to a positive pedestrian and aesthetic environment. The City values a high-quality impression for the entire range of viewers, from all-day shoppers in the Plan Area to travelers passing through Livermore on I-580.

3.7.1 Loading Areas

Functional loading areas are critical to retail uses that have frequent truck traffic. Some potential retail uses within the Plan Area have indicated that they can be served completely by smaller-sized trucks, not semi-trailers. However, some other retail services within the El Charro Plan Area may require larger trucks for delivery of their goods and products. To facilitate success of the retail ventures, and ensure the desired pedestrian-friendly, high-quality experience in the Plan Area, loading areas should comply with the following standards:

- a) Loading areas should have adequate and appropriate amounts of spaces dedicated to loading and unloading functions, and be easy to access for their users; either per building or per cluster of buildings.
- b) Loading areas should be designed to shield the public from potential unsightly, noisy, and noxious environments.
- c) Loading areas should not contain large, blank exterior walls void of detail especially as they are viewed from the I-580 Scenic Corridor.
- d) Loading areas should be designed with similar architectural detailing and quality as adjacent buildings, with appropriate screening methods, such as articulated walls, trellises, landscape elements, or a combination of methods.
- e) Loading areas should be sized adequately according to use, depending on the facility size and anticipated service vehicle size.
- f) Unless the development applicant provides an acceptable alternative design, one permanent truck loading and unloading space, separate from those provided for customers, shall be provided for retail buildings with more than 7,500 square feet of floor area. One additional space shall be provided for every additional increment of 20,000 square feet.

3.7.2 Trash Enclosures and Transformers

Enclosures for trash and recycling containers and areas containing trash enclosures and transformers will be located throughout the Plan Area in order to adequately provide services for the retail developments. The following additional guidelines, specific to trash and utility facilities apply:

- a) Trash receptacles should be located away from public view and provide direct access to sanitation trucks. Trash compactors shall be utilized where appropriate.
- b) Outdoor trash areas shall be screened by a minimum six foot high, non-combustible, attractive enclosure that matches adjacent building materials.
- c) Above ground transformers, switching devices and trash enclosures shall not be permitted in the front setback; all utilities must be under grounded.
- d) Driveways or travel aisles shall be a minimum of 16 feet wide with a 22 foot high vertical clearance; turn-around areas require a minimum 35 foot turning radius.

3.7.3 Site Utilities

Above ground utility poles are usually visually obstructive and distracting from a high-quality design and landscaping elements. The City of Livermore does not permit above-ground utilities, except for certain discreet circumstances during construction. Therefore:

- a) All new utilities shall be installed and maintained underground.
- b) Utilities shall be designed and installed to minimize disruption of off-site activity during construction.
- c) Temporary overhead power and telephone facilities shall be permitted only during construction.
- d) Utility boxes should be under grounded as feasible, where they would still be above the base flood elevation, or located in an inconspicuous location and screened; utility meters should be located on secondary building façades instead of primary ones.
- e) HVAC air intakes should be screened and located as far as possible and upwind from loading docks and other vehicular access points or on roof tops.

3.8 SIGNAGE

The following signage guidelines and standards identify a framework in which advertising, directions, and information can be accomplished without detracting from the overall quality and character of the Plan Area. Adequate guidelines and standards help create and promote a quality visual environment by allowing only signs that are compatible with the proposed development and effectively communicate their message. Standards for the specific sizes and placement of signs shall be established in the PD Zoning Districts.

3.8.1 General Signage Guidelines

Visible signage shall be designed to establish a strong identity for the entire development, and include building addresses.

- a) A master sign program shall be required as part of a development or complex that serves multiple-tenant buildings. The master sign program shall identify the placement, size, materials, colors, method of lighting, and other related requirements for all signs. Individual tenant signs under each development application do not have to be approved separately as long as they comply with the approved master sign program.
- b) Maximum sign areas shall be as established with Planned Development District for each development.
- c) Directional signage shall be located at major vehicular and pedestrian site access point.
- d) All signs shall be designed to complement the architectural style and setting of its adjacent structure; wall and fascia signs shall be compatible with the predominant visual elements of the building.
- e) Sign letters and materials shall be professionally designed and fabricated.
- f) Signs shall be constructed using high-quality materials such as metal, stone or wood.
- g) Animated, moving, flashing, blinking, reflecting, and revolving signs detract from the building, and are not permitted.
- h) Exposed conduit and tubing is prohibited; all transformers and other equipment shall be concealed.

3.8.2 Wall Signage

- a) Wall signs shall be limited to identify tenants within each building (name or symbol of the firm, company, or corporation only).
- b) Signs may be wall-mounted, projecting, or combined with awnings; they should not be placed on windows or painted directly on buildings.

- c) Wall signs and logos attached to the building shall be individual letters and surface mounted.
- d) Externally illuminated or halo lit signs are encouraged; internally-lit signs are not permitted.
- e) Roof signs shall not be permitted

3.8.3 Freestanding Signage

- a) Freestanding identification signs shall be limited to major site-entries at perimeter locations adjacent to existing arterials.
- b) All freestanding signs shall be of a monument design and not exceed the height of any adjacent buildings.
- c) Monument signs shall be designed to complement the architectural style of the buildings they serve and shall utilize high quality materials such as brick, stone, tile, cast concrete, or similar masonry materials.
- d) Cabinet signs are not allowed.
- e) One significant retail sign, visible from the highway, is permitted within each development project, but must retain all other design considerations, including scenic corridor compliance, discussed within this section.
- f) All signs shall be externally illuminated, but shielded to avoid being a nuisance or hazard.

3.8.4 Directional Signage

- a) Directional or informational signs shall be used to provide direction to on-site automobile traffic or pedestrians, and should not be visible from off-site areas.
- b) Separate signage may be necessary to direct trucks, cars, and pedestrians to appropriate parking or entry areas.

3.9 PARKING LOT DESIGN

Basic parking requirements from the LPZC and City Design Standards and Guidelines must be followed, along with the Specific Plan requirements outlined below. Please also see Figure 3-6 for images depicting the guidelines for parking lot design. Throughout the El Charro Specific Plan Area, the visual presence of automobiles should be minimized to the extent possible.

Two main challenges to this objective are the fact that surface parking will be used throughout the development, and most properties are highly visible from all sides, thus eliminating the possibility of rear parking lots. Furthermore, the Scenic Corridor dictates that all development maintain significant setbacks from I-580. These setbacks yield large parking fields between I-580 and the development. Final parking requirements and design will be determined on a project-by-project basis.

3.9.1 General Guidelines

- a) The minimum parking ratio shall be four parking spaces per 1,000 square feet. The maximum ratio is five and one-half (5.5) parking spaces per 1,000 square feet of development (approximately one space per 182 square feet of gross floor area), and up to six spaces per 1,000 square feet with overflow parking. Uses may, with City approval, develop overflow parking to accommodate seasonal peaks in demand. In no case shall the total parking ratio exceed six parking spaces per 1,000 square feet. A use that requires less than four spaces per 1,000 square feet, shall comply with the LPZC. For institutional/assembly uses, the parking ratio shall be one (1) space per three (3) seats.
- b) The standard parking stall size in the Specific Plan Area is 9 feet by 18 feet. Circulation aisles generally observe 24 feet. Compact parking is allowed consistent with the LPZC.
- c) Bicycle parking shall be provided on-site at the ratio of one (1) bicycle locker per thirty (30) employees, and one (1) bicycle rack space (3 feet by 8 feet) per 6,000 square feet of building area. Racks must be clearly visible to users, designed to allow for locking front wheels and frames, provided in close proximity to buildings, and not impede pedestrian or automobile traffic.
- d) Shared parking and driveways between properties and uses are encouraged to help reduce the overall space dedicated to parking and to minimize underutilized parking areas.
- e) Parking stalls should be designed at 90-degree angles; however 45-degree angle parking will also be accepted.
- f) Parking areas should be organized and tiered to encourage employee parking in areas further from the buildings and parking closest to retail entrances for disabled patrons.
- g) Clearly marked pedestrian connections and crossing areas to retail buildings shall be visually

- and physically differentiated from automobile driveways throughout parking areas in order to reduce the potential for pedestrian and vehicular conflicts. Textured or patterned borders and overhead structures such as trellises are encouraged to differentiate pedestrian walkways.
- h) Pedestrian walkways in parking areas should be safe and attractive, incorporating adequate landscaping, shade, and lighting.
 - i) Alternative types of paving may be used in overflow parking areas to minimize storm water runoff and potential water quality impacts.

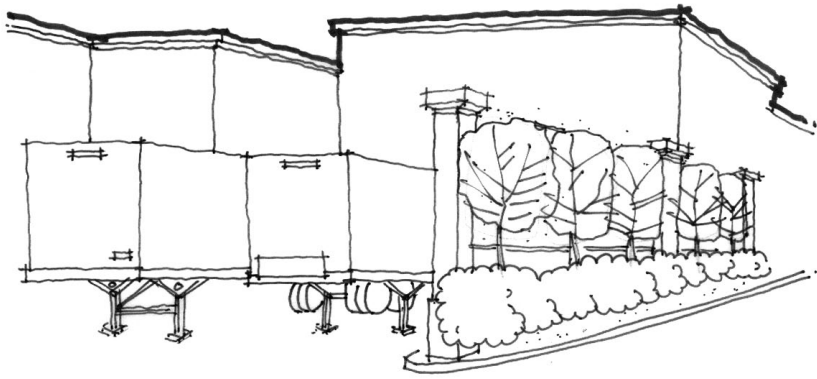
3.9.2. Parking Lot Landscape

Landscaping in and around parking lots is vital to improving their appearance, as well as reducing the effects of heat and runoff due to large paved areas. Not only does a variety of vegetation create a more interesting and aesthetically pleasing environment, planted areas help reduce stormwater drainage problems and reduce the effects of wind and noise. Parking lots are also significant heat islands. By providing trees or other means of shading, the heat and glare resulting from them can be significantly reduced, making them more pleasant places to be.

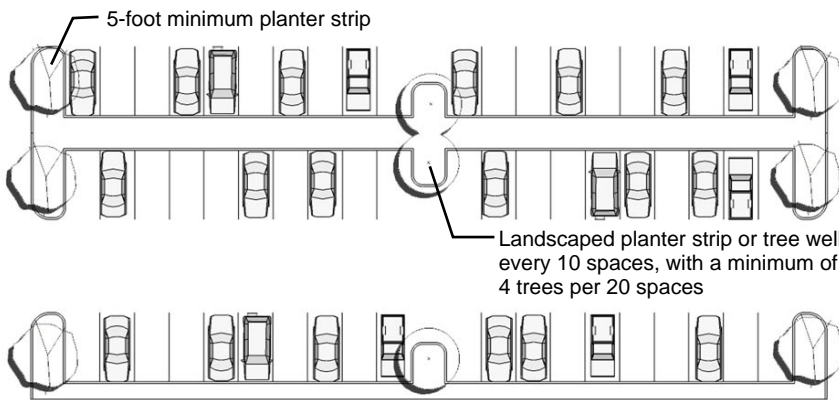
The following guidelines will mitigate both the visual as well as the environmental impacts of the Specific Plan Area's parking lots:

- a) Parking lot perimeters must follow the guidelines discussed under Section 3.11.1 for public right-of ways.
- b) Special treatment (landscape, architecture, and signage) should be used to define auto entrances.
- c) To ensure adequate shading of parking lots, parking lot shade zones shall be planted with the equivalent of four trees for every 20 parking spaces planted in clusters to function as focal elements.
- d) Shade tree clusters, and landscaping in general, should be designed to avoid creating concealable areas that could affect security.
- e) Parking lots must be landscaped to provide a minimum of 40 percent shade cover (when trees are at full maturity and have foliage) at high noon. Parking lot shade trees shall be tall species with high canopies to provide shade while maintaining views from the freeway to adjacent development.
- f) Planter strips (a minimum of five feet wide, eight feet preferred) or tree wells (located between parking spaces) must be placed at least every tenth parking space.
- g) Pedestrian walkways through parking areas should be heavily landscaped with trees, shrubs, and low ground cover, providing a buffer between people and automobiles.

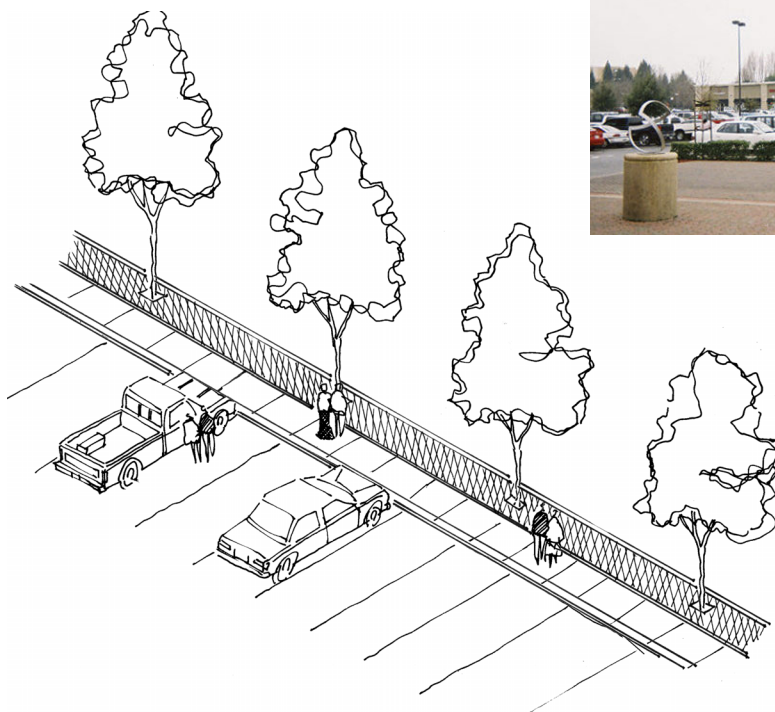
- h) At least one pedestrian walkway should be provided corresponding to major project entries. In no case shall there be less than one pedestrian walkway per eighth drive aisle.
- i) Parking areas should be designed and landscaped to minimize their appearance, especially along the I-580 Scenic Corridor. Discreet breaks are encouraged in all screening to create interest, and provide sufficient visibility to the amenities and highlights of the development.
- j) Large parking fields will be created between development and the freeway due to extensive building setbacks required by the scenic corridor. Therefore, a balance will be required between the need for shade trees and the requirement to preserve views of distant hills. To realize this balance, landscaping will utilize a variety of techniques and patterns to break up the expanse of parking lots and create view corridors through them to distant ridgelines.



Loading areas and trash enclosures shall be screened with appropriate landscaping and/or enclosures.



Landscaped planter strips or tree wells must be placed at least every tenth parking space. Special treatment (landscape, architecture, and signage) should be used to define auto entrances.



Clearly marked pedestrian connections and crossing areas to retail buildings shall be visually and physically differentiated from automobile driveways throughout parking areas.

Within parking lots, the equivalent of four trees for every 20 parking spaces must be included, and planted in clusters to function as focal elements



Figure 3-6 Loading Area and Parking Lot Design
CITY OF LIVERMORE EL CHARRO SPECIFIC PLAN

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3.10 CITY GATEWAY AND ENTRY CORRIDOR DESIGN

As discussed in Chapter 2 Land Use Plan of this document, the location of the El Charro Specific Plan at the City's western gateway requires additional guidelines for the visual quality of the area. It is preferred that the totality of the gateway treatment be comprised of different but complementary components, including distinctive entry corridor elements along the entire length of the I-580 frontage on the northern edge of the Plan Area.

The new intersection of El Charro Road and Jack London Boulevard shall be developed as the western City gateway. Components will include distinctive elements that announce the arrival to Livermore along with complementary landscape features that will be implemented on both the northeast and southeast corners and within the roadway median. A landscape treatment will continue into the Plan Area alongside Jack London Boulevard. For each treatment, City staff and the Design Review Committee will work with developers to ensure the appropriate design and construction of the required elements; the City recognizes that cost sharing mechanisms will be pursued as appropriate and feasible. In addition to directives outlined in Chapter 10 of the City's Design Standards and Guidelines, this Specific Plan requires the following elements below (see Figure 3-7 for examples of desirable gateway and entry design).

3.10.1 City Gateway

The eastern side of the El Charro Road and Jack London Boulevard intersection has been designated as a primary City gateway. The following guidelines and directives should be incorporated into its design:

- a) Landmark features may include vertical elements, architectural details, and artistic statements.
- b) An area of 75 feet by 75 feet shall be reserved at each corner for placement of a gateway feature.
- c) Features must be appropriately scaled, well designed, and constructed of high-quality materials (such as brick, natural stone, or architectural metals) reflective of the City's character and vision
- d) Signs should include a mixture of colors and textures, such as stacked stone columns with smooth stone panels of another color.
- e) Vertical elements should not exceed adjacent building heights or regulated height limits.
- f) Treatments of the City gateway must distinguish its prominence from other entrances within the Plan Area.

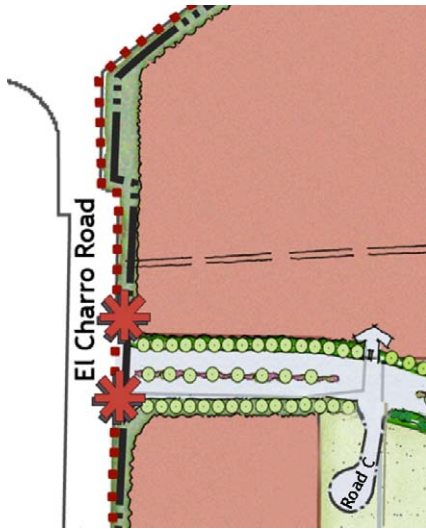
- g) Proposed gateway signs and landscaping shall be approved as part of the development review process.
- h) The northwest corner of the City's open space (on the south side of Jack London Boulevard) shall also be considered as a secondary City gateway, designated as such by a unique landscape treatment complete with scattered picnic tables and a connection to the regional multi-use trail.

3.10.2 Entry Corridor

The over 5,000 linear feet of property fronting the southern edge of I-580, along the entire northern edge of the Plan Area, has been designated as an important entry corridor for the City of Livermore. Therefore, the following treatment will be pursued during the development of El Charro Plan Area.

- a) The required vineyard buffer, approximately 50 feet deep, shall be incorporated into a larger aesthetically-pleasing landscaped buffer along the entire northern edge of the Plan Area.
- b) Special landscape treatments are also planned for the Jack London Boulevard corridor.
- c) A bioswale, serving both as a functional storm water conveyance feature and a design element, will tie the Jack London Boulevard corridor together. The bioswale will run along both sides of the corridor, aside from the south side of the street adjacent to the retail development property. Swales are encouraged to be designed with adjacent pedestrian walkways create recreation opportunities.

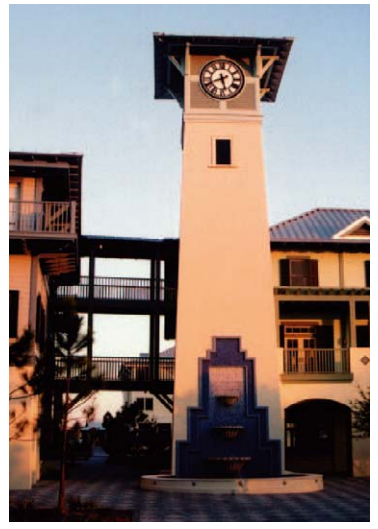
The above features require facilities that shall initially be maintained by private development. To assure permanent funding, maintenance revenues shall be provided through the establishment of a Landscape Maintenance District for the Plan Area. If the private entity fails to maintain the area in accordance with City standards, the City would take over maintenance responsibilities.



Important City Gateway locations.



Landmark features for gateways may include vertical elements, architectural details, and artistic statements.



An entry corridor with special landscape treatments is planned for Jack London Boulevard as it enters the Plan Area from El Charro Road.



Split-rail fence designs provide an example of how to enhance the visual quality and continuity of entry corridors and gateways.



A natural swale will run along the both sides of Jack London Boulevard, serving as a functional element for the stormwater management system as well as a design element meant to enhance the entry corridor.



Figure 3-7 City Gateway and Entry Corridor Design

CITY OF LIVERMORE EL CHARRO SPECIFIC PLAN

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3.11 LANDSCAPE DESIGN

The landscape elements throughout the Specific Plan Area shall be appropriate for the scale and character of the various retail, parking, and public uses, such as entries, plazas, and passive recreation areas. In general, landscaping should help provide an attractive, welcoming, and pedestrian-friendly environment that is representative of the agrarian heritage and character of Livermore, and is pleasant for all employees and visitors associated with the site. Landscape treatments visible from I-580 should enhance the traveler's experience; especially in the gateway areas.

The guidelines are intended to create a uniform identity for the Plan Area, help establish a "sense of place," taking into account both functional and aesthetic considerations. Generous landscaping will be provided to allow for adequate screening, shade for pedestrians, and a pleasing streetscape. In addition to the guidelines listed below, all landscaping must also be compliant with the LPZC standards for commercial development and parking. Figure 3-8 illustrates the landscape standards and guidelines outlined in this section.

3.11.1 General Planting

Planting requirements are important to help ensure the landscape will be healthy, attractive, and sustainable. General planting guidelines for the Plan Area are provided below:

- a) Native and drought-tolerant plant materials, contextual to the City of Livermore, should be used throughout the Plan Area. Table 3-1 lists all acceptable plant materials.
- b) As required by the 2004 Water Master Plan, recycled water systems shall be used for all irrigation systems in the City.
- c) Sheet plastic in planting areas should not be used.
- d) Plantings shall be colorful and highly accented. Trees and shrubs should have either colorful foliage or flowering characteristics, except adjacent to loading and storage areas, which may require a species that provides more vertical clearance.
- e) The required vineyard buffer should be designed in line with the most current practices in sustainable viticulture, including integrated pest management techniques. This may include pest control through soil management, and the promotion of diverse animal, bird and insect populations that lead to self-regulating predator and prey relationships.
- f) Landscape buffers at least five feet in width should be provided along all right-of-ways, except for those right-of-ways specifically required to provide other buffer setbacks.
- g) Entryways should have increased numbers of trees and other plantings for emphasis, with medians including groundcover and shrubbery to provide a full, lush appearance.

- h) Perimeter and setback landscape components shall consist of tree and shrub patterns that serve as framing elements for each development; shrubs must not be more than three feet tall within 25-feet of driveways for visibility.
- i) Trees, shrubs, hedges, and groundcover landscape elements should be massed to define outdoor spaces; i.e., larger, more decorative plants to reinforce a primary entry. Vines shall be encouraged on larger wall façades, especially for loading area and trash screens.
- j) Landscape areas internal to individual projects shall provide adequate shade trees and landscape amenities to create a comfortable environment.

Table 3-1: Plant Palette

TREES

<i>Botanical Name</i>	<i>Common Name</i>	<i>Size</i>	<i>Water Use</i>
Aesculus californica	Buckeye	24" Box	Low
Arbutus Marina	Strawberry Tree	24" Box/ 15 Gallon	Low
Carpinus Betulus 'fastigiata'	European Hornbeam	24" Box	Moderate
Cercis Canadensis	Eastern Redbud	24" Box	Low
Chionanthus Retusus	Chinese Fringe Tree	24" Box	Moderate
Chitalpa Tashkensis 'pink Dawn'	Chitalpa	24" Box	Low
Cupressus sempervirens	Italian Cypress	24" Box/15 Gallon	Low
Lagerstroemia indica 'Commanche'	Crape Myrtle	24" Box	Moderate
Lagerstroemia Indica 'Muskogee'	Crape Myrtle	24" BOX	Moderate
Lagerstroemia Indica 'Natchez'	Crape Myrtle	24" BOX	Moderate
Lagerstroemia indica 'Tuscarora'	Crape Myrtle	24" Box	Moderate
Melaleuca linariifolia	Flaxleaf Paperbark	24 Box/ 15 Gallon	Low
Nerium oleander standard	Oleander	15 Gallon	Low
Oleo Europaea 'swan Hill'	Olive	36" BOX	Low
Pistacia Chinensis	Chinese Pistache	24" BOX	Low
Platanus acerifolia 'Columbia'	London Plane Tree	24" & 36" Box/15 Gallon	Moderate
Platanus racemosa	California Sycamore	24" Box	Moderate
Populus Nigra 'italica'	Lombardy Poplar	24" BOX	Moderate
Pyrus calleryana 'Aristocrat'	Aristocrat Pear	15 Gallon	Moderate
Pyrus calleryana 'Chanticleer'	Chanticleer Pear	15 Gallon	Moderate
Quercus agrifolia	Coast Live Oak	15 Gallon	Low
Quercus lobata	Valley Oak	24" Box/15 Gallon	Low
Quercus Robusta	Scarlet Oak	24" BOX	Low
Robinia ambigua 'Purple Robe'	Purple Robe	24" Box/15 Gallon	Low
Rose Standard	Species To Be Selected	5 Gallon	Moderate
Salix babylonica	Weeping Willow	15 Gallon	Low
Salix laevigata	Red Willow	15 Gallon	Low
Schinus molle	California Pepper Tree	24 Box/ 15 Gallon	Low

VINES

Clytostoma callistegioides	Violet Trumpet Vine	5 Gallon	Low
Distictis buccinatoria	Blood-red Trumpet Vine	5 Gallon	Low
Ficus pumila 'Minima'	Dwarf Creeping Fig	1 Gallon	Moderate
Jasminum Polyanthemum	Jasmine	5 GAL.	Low
Wisteria Sinensis	Chinese Wisteria	5 GAL.	Low
Vitis Species	Grapes	5 GAL.	Low

ORNAMENTAL GRASSES

Festuca ovina 'Glaucua'	Blue Fescue	1 Gallon	Low
Pennisetum setaceum 'Rubrum'	Purple Fountain Grass	1 Gallon	Low
Pennisetum setaceum	Fountain Grass	1 Gallon	Low

SHRUBS

<i>Botanical Name</i>	<i>Common Name</i>	<i>Size</i>	<i>Water Use</i>
Arbutus unedo	Strawberry Tree	5 Gallon	Low
Arbutus unedo 'Compacta'	Dwarf Strawberry Tree	5 Gallon	Low
Arctostaphylos densiflora 'Howard McMinn'	Manzanita	5 Gallon	Low
Arctostaphylos bakeri 'Louis Edmunds'	Manzanita	5 Gallon	Low
Camellia sasanqua 'Cleopatra'	Camellia	5 Gallon	Moderate
Carex tumicola	Sedge	1 Gallon	Moderate
Ceanothus 'Concha'	Ceanothus	5 Gallon	Low
Ceanothus thrysiflorus 'Snow Flurry'	Snow Flurry Ceanothus	5 Gallon	Low
Dietes hybrid 'Orange Drops'	Fortnight Lily	5 Gallon	Low
Dietes Vegeta	Fortnight Lily	1 GAL.	Low
Escallonia fradesii	Escallonia	5 Gallon	Moderate
Hemerocallis hybridus 'Happy returns'	Yellow Daylilies	5 Gallon	Moderate
Hemerocallis spp. 'Hyperion'	Yellow Daylilies	5 Gallon	Moderate
Hemerocallis 'Stella D'Oro'	Dwarf Yellow Daylilies	5 Gallon	Moderate
Heteromeles arbutifolia	Toyon	5 Gallon	Moderate
Lavandula dentata	French Lavender	5 Gallon	Moderate
Liriope m. 'Silvery Sunproof'	Varigated Blue Lily Turf	5 Gallon	Moderate
Lavandula Intermedia	Lavender	5 GAL.	Moderate
Lavatera Thuringiaca	Tree Mallow	5 GAL.	Moderate
Mahonia aquifolium 'Compacta'	Oregon Grape	5 Gallon	Low
Nepeta Faassenii	Catmint	1 GAL.	Moderate
Penstemon Gloxiniodes	Penstemon	5 GAL.	Low
Phormium tenax 'Surfer'	New Zealand Flax	5 Gallon	Low
Phormium tenax 'Yellow Waves'	New Zealand Flax	5 Gallon	Low
Pittosporum tenuifolium	Pittosporum	5 Gallon	Low
Pittosporum t. 'Varigata'	Varigated Pittosporum	5 Gallon	Low
Prunus l. 'Zabeliana'	Zabel Laurel	5 Gallon	Moderate
Rhamnus californica 'Eve Case'	Dwarf Coffee Berry	5 Gallon	Low
Rhaphiolepis indica 'Springtime'	India Hawthorn	5 Gallon	Low
Rhus ovata	Sugar Bush	5 Gallon	-
Ribes sanguineum	Red Flowering Currant	5 Gallon	Low
Rosa californica	California Wild Roses	5 Gallon	Low
Rosa 'Meidiland' red	Meidiland Rose	5 Gallon	Low
Rosa 'knockout'	Knockout Rose	5 GAL.	Low
Rosmarinus officinalis 'Tuscan Blue'	Tuscan Blue Rosemary	5 Gallon	Low
Rubus ursinus	Native California Blackberry	5 Gallon	Low
Salvia clevelandii	Cleveland Sage	5 Gallon	Low
Salvia Leucantha	Mexican Bush Sage	5 GAL.	Low
Strelitzia reginae	Bird of Paradise	15 Gallon	Moderate
Symphoricarpos albus	Common Snowberry	5 Gallon	Low
Tulbaghia violacea	Society Garlic	5 Gallon	Moderate
Viburnum Tinus 'spring Bouquet'	Laurustinus	5 GAL.	Moderate
Westringia Fruticosa	Westringia	5 GAL.	Low

GROUNDCOVERS

Arctostaphylos 'Emerald Carpet'	Trailing Manzanita	1 Gallon	Low
Arctostaphylos Uva-Ursi	Bearberry	1 Gallon	Low
Coprosma kirkii 'Vista Verde'	Coprosma Vista Verde	1 Gallon	Low
Cotoneaster dammeri 'lowfast'	Bearberry Cotoneaster	1 Gallon	Low
Erigeron Karvinskiana	Santa Barbara Daisy	1 Gallon	Low
Gazania 'Mitsua'	Gazania	1 Gallon	Low
Geranium 'russell Prichart'	Cranesbill	1 Gallon	Moderate
Hypericum calycinum	Creeping St. Johnswort	1 Gallon	Moderate
Lantana Montevidensis	Trailing Lantana	1 Gallon	Moderate
Rosmarinus 'irene'	Trailing Rosemary	1 Gallon	Low
Rosmarinus officianalis	Trailing Rosemary	1 Gallon	Low
Seasonal Annuals	Seasonal Annuals	4" Pots	Moderate
Teucrium cossonii majoricum	Creeping Germander	1 Gallon	Low
Trachelospermum jasminoides	Star Jasmine	1 Gallon	Moderate
Vinca Minor	Dwarf Periwinkle	1 Gallon	Low
Verbena Tappien Lavender	Purple Verbena	1 Gallon	Moderate

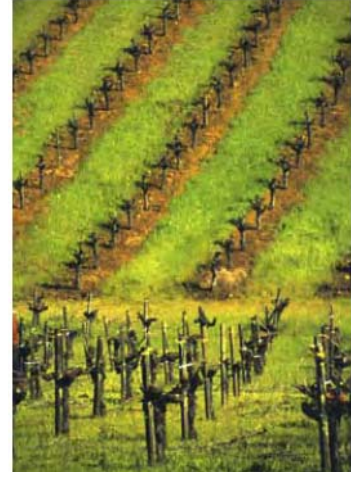
3.11.2 Streetscape Design

Street landscaping provides the foundation for enhancing the Plan Area's overall character and pedestrian-friendliness. Figure 3-9 illustrates the proposed streetscape hierarchy for the Plan Area to support the established land use framework, as well as create a cohesive and aesthetically pleasing network of streets. Specific locations for entries, formal streetscape plantings, and rural plantings are identified for each of the proposed streets within the Plan Area. The streetscape design is also intended to provide a buffer and shade for sidewalks and surface parking areas through installing a consistent pattern of street trees within the landscape easements of street right-of-ways. While formal planting patterns will be used along some of the public streets, low shrubs, vineyards, and native plantings will be used in other areas to provide a more informal and rural feeling. Examples of the different forms of plantings illustrated in the streetscape hierarchy diagram are shown in Figure 3-10, Streetscape Design.

The following guidelines apply to the streetscape design:

- a) All public right-of-ways, except for those areas along the Jack London Boulevard extension classified as rural streets, shall contain at least one street tree every 30 feet (on both sides of the street). All street trees shall have a minimum 24-inch box size and be selected from a list of City-approved trees, listed in Table 3-1. Driveways, drive aisles, and pedestrian connections should also be lined with trees.
- b) Medians should be wide enough, where feasible, to support trees, particularly large trees that have a high and broad branching canopy.
- c) Distinguish between major and minor streets through different landscaping palettes. Maintain design continuity for street medians and frontage landscape within each street type (i.e. Minor streets, such as Freisman Road, Roads A, and B, should follow similar aesthetic).

Agricultural Character: In general, landscaping should help provide an attractive, welcoming, and pedestrian-friendly environment that is representative of the agrarian character and heritage of Livermore.



Accents: Plantings shall be colorful and highly accented. Trees and shrubs should have either colorful foliage or flowering characteristics.

Native Plant Materials: Native and drought-tolerant plant materials are encouraged, especially along rural roadways.



Perimeter and Setback Landscaping: Landscape components for perimeters and setbacks shall consist of tree and shrub patterns that serve as framing elements for each development.



Figure 3-8 General Landscape Standards
CITY OF LIVERMORE EL CHARRO SPECIFIC PLAN

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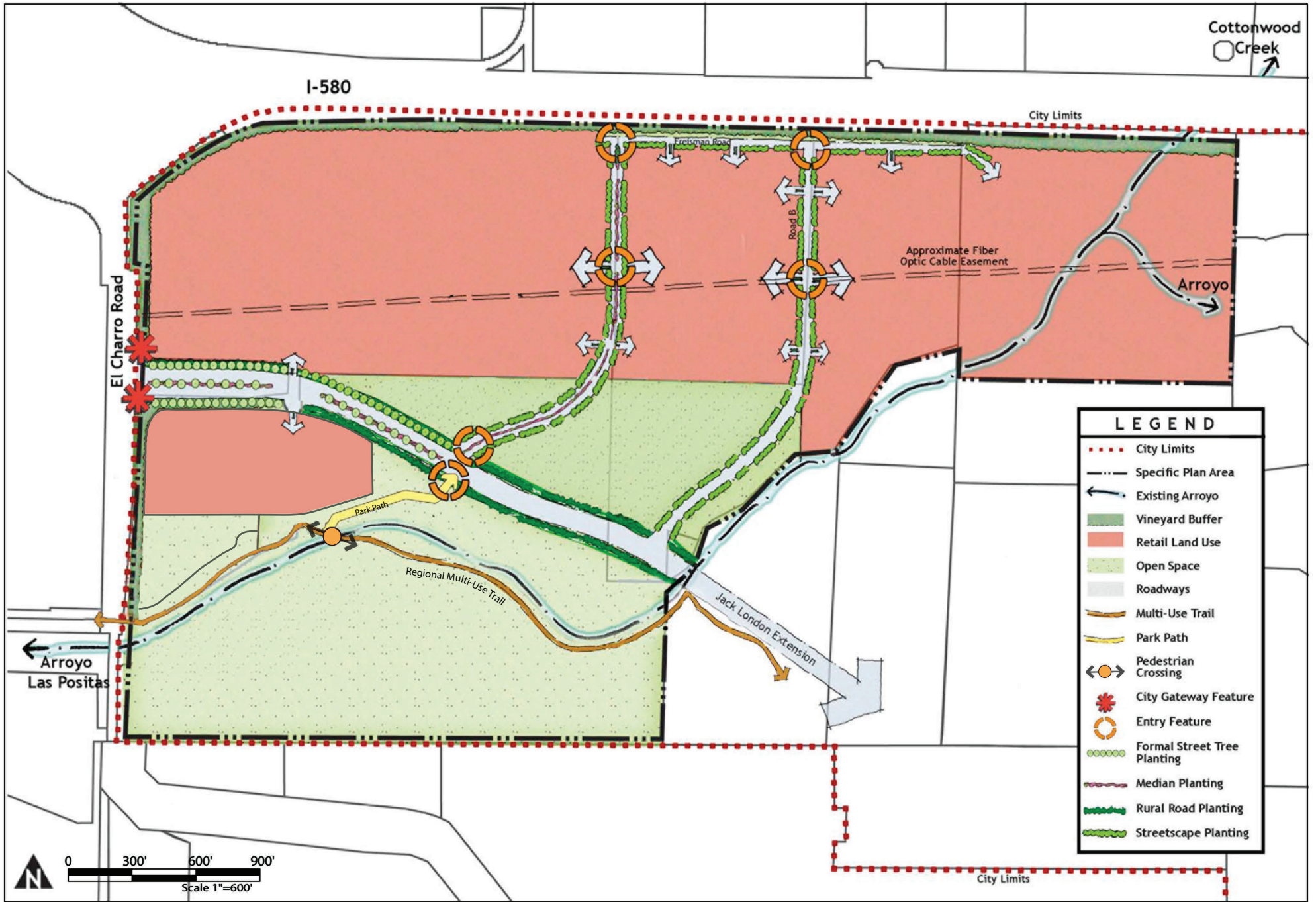


Figure 3-9 Streetscape Hierarchy
CITY OF LIVERMORE EL CHARRO SPECIFIC PLAN

Note: This figure is conceptual in nature and subject to modifications based on subsequent development review.

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Median Planting



Formal Street Tree Planting



Agricultural Buffer Plantings



Edge Treatments



Multi-Use Trail Plantings



Rural Road Plantings

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3.11.3 Storm Drainage

Adequate storm drainage provisions are essential to reducing water quality impacts associated with runoff, including the protection of the arroyo system that runs through the Plan Area. The most current technologies in natural storm drainage systems should be implemented, incorporating the standards outlined below, and as shown in Figure 3-11.

- a) All non-turf areas should be designed as planting beds with groundcovers consisting mainly of plant materials to help with water retention and improve aesthetics, loose mulches, bark chips, and wood grindings.
- b) Creek shall remain natural and any new channels shall be designed to fit with the land features.
- c) Bioswales should be incorporated into a comprehensive landscape design, lined with native, naturalized, or Red Fescue grasses, or with groundcover and accent shrubs (must conform to City Standard L-21).
- d) Swales shall have a five percent maximum longitudinal slope, and maximum three to one side slope (horizontal to vertical).
- e) Swale bottoms should be graded flat for best pollution removal, with an under drain system to drain any standing water within 48 hours.
- f) Additional vegetative filter strips of dense low groundcover should be incorporated throughout developments.
- g) Curbs must be designed to direct stormwater into all planted areas.
- h) All water must be treated prior to acceptance into City storm drain system.

3.11.4 Irrigation

The El Charro Specific Plan is within the recycled water district and should use recycled water for all irrigation uses. Applicants should refer to the City's list of appropriate plantings for these areas. Irrigation standards are intended to help ensure efficient use of water and resources, and also help maintain an attractive and comfortable landscape environment.

- a) Turf areas should be irrigated separately from planting areas, which should be grouped according to water needs.
- b) Planting areas, including trees, should be watered efficiently by an automatic system with low volume drip, or bubble emitters; spray emitters are in shrub and tree planting areas. The latest technology should be implemented, which interrupts watering schedules during times of rain.

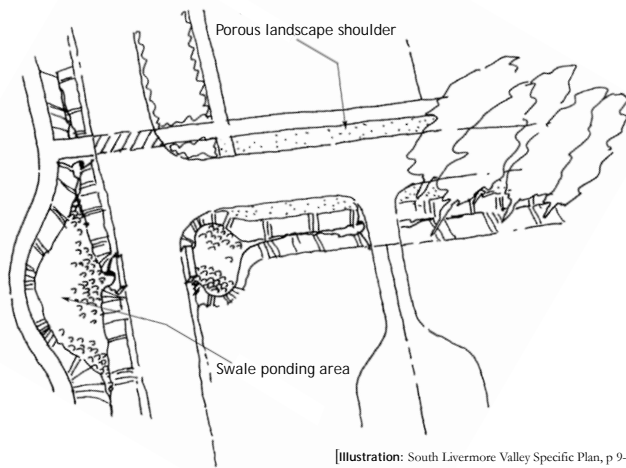
- c) Irrigation systems should be designed to prevent water overflow onto sidewalks, common areas, or architectural features and walls.
- d) All landscaping hardware, such as backflow preventers and meters, or storage areas should be fully screened with additional landscaping.
- e) Parallel potable water irrigation shall be provided for any vineyards used for viticultural production.

3.11.5 Walls and Screening Elements

Walls and fences should be used within the Plan Area as landscaping design elements or visual barriers for screening purposes. It is essential that any such structure be visually appealing, contextual, and adequate for its purposes.

- a) Where landscaping is deemed insufficient, walls or fences may aid in screening service areas.
- b) Walls along walkways or setbacks should not exceed three feet in height, except up to six feet in loading or trash enclosure areas.
- c) Visually permeable walls of natural, authentic or high quality materials are encouraged, such as, stone columns with wood rails. Architectural metals or concrete reflective of Livermore's agrarian vernacular may also be used.
- d) Chain link fencing is not permitted within the El Charro Specific Plan Area, except as required and installed by Caltrans along I-580.
- e) Long expanses of walls should be avoided, and interrupted with architectural accents to avoid monotony. Staggered wall surfaces, pilasters located at property lines, walls with planters incorporated into the wall, and variations in height are all recommended techniques to add architectural variation to walls.
- f) Walls or fences should not be used to separate lots, adjacent buildings, or other neighboring development.
- g) Landscape is required in conjunction with all walls, regardless of material.

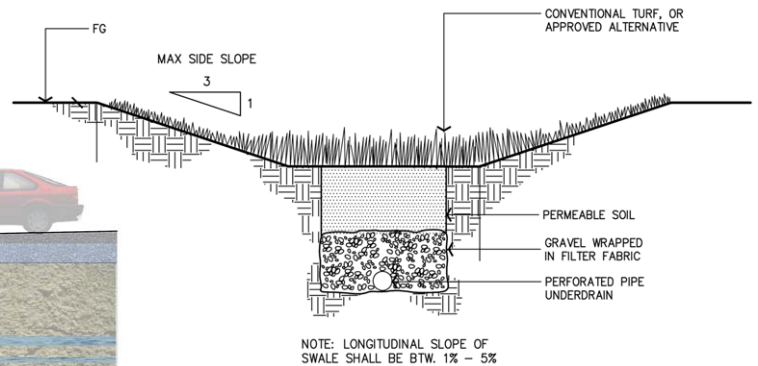
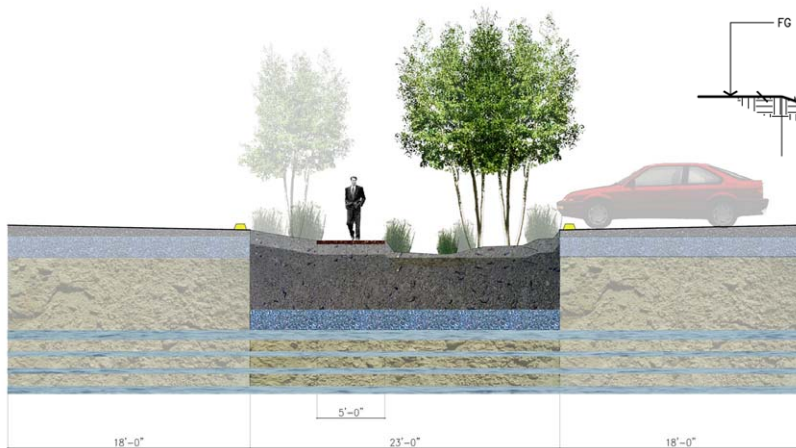
Bioswale Locations: Natural swales are encouraged throughout all development, at varying locations and scales.



[Illustration: South Livermore Valley Specific Plan, p 9-32]

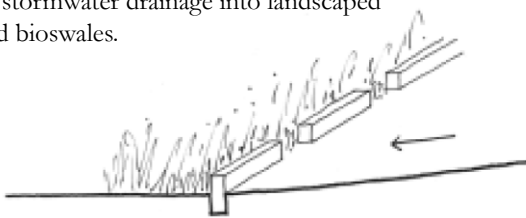


Bioswale Design: Minimum standards for bioswale construction and approved plantings are included in the Livermore Standard Details; they may also be expanded and designed to incorporate pedestrian walkways and/or recreation opportunities, as shown below.



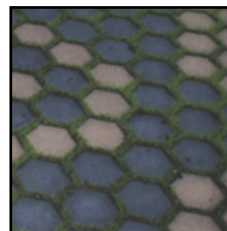
[Illustration: Livermore Standard Details, p 72]

Perforated Curbs: Curbing should be designed to allow stormwater drainage into landscaped areas and bioswales.



[Illustration: Livermore Design Standards and Guidelines, p 208]

Permeable Surfaces: The use of paving materials that permit water absorption are encouraged for parking lots and walkways, in order to minimize surface runoff.



[Photo: Livermore Design Standards and Guidelines, p 207]

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