CHAPTER 9: STREETS

his chapter includes guidance for the design of streets in Livermore, with special attention to major streets, since these are the City's major travel corridors and are typically the first route of entry into the City. Many streets also provide axial views to the surround ing region. The guidelines contained in this chapter address the need to provide adequate automobile circulation in the community, while ensuring the City's transportation corridors are well designed and convey a positive image of the City through attractive landscaping and appropriate pedestrian components. For additional guidance, please refer to the Livermore Planning and Zoning Code and the City of Livermore Standard Details, Standard Specifications and the Development Plan Check and Procedures Manual.

CHAPTER SECTIONS

- A. Goals
- B. Major Streets
- C. General Standards and Guidelines for City Streets



A. Goals

The following goal statements set forth the urban design intent implicit in the design guidelines formulated for the City's streets:

- 1. To enhance the City's character along the principal entry corridors.
- 2. To establish a positive first impression of the City and facilitate access into the downtown core.
- 3. To enhance the appearance of new and existing streets by improving roadway landscape treatments, including plantings, pavement, lighting and signs.
- 4. To enhance the pedestrian environment by developing streets at a scale that is conducive to pedestrian and bicycle use.
- 5. To preserve the City's streets as valuable view corridors from the City out to the hills and mountain ranges which ring the City.
- 6. To reduce the sense of visual and psychological barriers created by the railroad at at-grade crossings and underpasses.

B. Major Streets

The streets listed below are those that are referenced in the General Plan as Major Streets. This street classification covers those streets that are medium-speed, high-capacity routes that provide opportunities for cross-town travel and freeway access. They are typically four- to six-lane divided streets that interconnect with lower level Collector and Local Streets. Access to Major Streets from abutting properties via curb cuts is limited and, in most cases, parking is prohibited.

As noted in the General Plan, the north-south streets that are categorized as Major Streets include:

- ♦ Isabel Avenue
- ♦ Murrieta Boulevard
- ♦ Vallecitos Road/Holmes Street
- ♦ Livermore Avenue

- ♦ Mines Road
- ♦ Vasco Road
- ♦ Greenville Road

East-west streets categorized as Major Streets include:

- ♦ North Canyons Parkway
- ♦ Northfront Road
- ♦ Jack London Boulevard
- ♦ East Stanley Boulevard
- ♦ Las Positas Road
- ♦ Patterson Pass Road
- ♦ First Street

- ♦ Railroad Avenue
- ♦ East Avenue
- ♦ Springtown Boulevard
- ♦ Portola Avenue
- ♦ Fourth Street
- ♦ Tesla Road
- ♦ Concannon Boulevard

- **1.1.1** Major Streets should be designed with a consistent landscape theme as they extend through the City.
- 1.1.2 New construction of single-family homes is generally not encouraged fronting on Major Streets.
- 1.1.3 Major Streets should be lushly landscaped with broad branching shade trees.
- 1.1.4 Landscaping and design of Major Streets and Corridors should be developed consistent with the Livermore Entry Corridors Conceptual Landscape Plan.



Major Street landscaped with consistent design theme.



Street trees and street lamps scaled to the pedestrian create better pestrian environments on Major Streets.

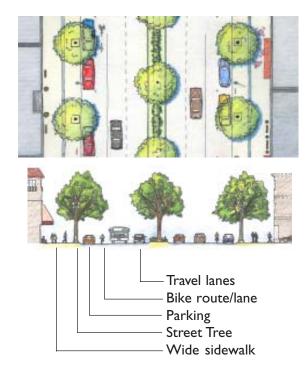
C. General Standards and Guidelines for City Streets

This section gives design guidance for streetscape features. All landscaping on streets, medians and street frontages will be required to comply with the City of Livermore Standard Details and Specifications and the City's Plan Check Manual. Please contact the City's Engineering Division for additional information on street design.

1. Street Widths

GUIDELINE

1.1.1 Pavement widths on many existing streets adversely affect the visual and urban design character of the area being served. Wide streets are generally at odds with preserving the pedestrian scale and intimate character that contribute to successful residential neighborhoods and commercial centers. Therefore, design elements are encouraged to be used to reduce perceived street widths. These elements can include landscaping, street tree placement, medians and street furniture.



2. Medians

- **2.1.1** Landscaped medians should be implemented on wider, busier streets to create visual interest, a more intimate roadway scale, and a place for pedestrians to take refuge while crossing wide streets.
- **2.1.2** Medians should be wide enough, where feasible, to support trees, particularly large trees that have a high and broad branching canopy.
- **2.1.3** Where medians are narrowed near intersections, landscaping should be graduated and include the use of small accent trees and ground cover.
- **2.1.4** The use of groundcover at intersections is favored over the extensive use of hardscape.



Median landscaped with earth berm and line of trees.



Median landscaped with ground cover near busy street intersection.

- **2.1.5** Hardscape should only be used in medians where planting is not feasible due to site-specific constraints such as narrow median width or preservation of a significant view corridor.
- **2.1.6** All landscaping should be served by an automatic irrigation/drip system, consistent with City Standard Details and Specifications.



Narrow median without landscaping.

3. Planting Strips

STANDARDS

- **3.1.1** Planting strips shall be designed to be wide enough to accommodate large street trees that have a high, broad branching canopy.
- **3.1.2** Landscaping in planting strips shall be adequately maintained and include the installation of an irrigation system.



Planting strip between street and residential sidewalk includes tall street trees.

- **3.1.3** To provide a landscape separation between street and sidewalk, planting strips should be installed between the back of the curb and the sidewalk.
- **3.1.4** The use of groundcover adjacent to intersections is favored over the extensive use of hardscape.
- **3.1.5** Hardscape should only be used in areas where planting is not feasible due to site-specific constraints such as narrow median width or preservation of a significant view corridor.
- **3.1.6** The installation of planter strips is preferable in most cases to monolithic sidewalks.



Planting strips create a buffer zone between the sidewalk and the street.

4. Street Trees

STANDARDS

- **4.1.1** Street trees shall be a minimum 24-inch box container size and should be double staked on planting.
- **4.1.2** Street tree planters shall be provided with an irrigation system to ensure maintenance and proper growth of trees.
- **4.1.3** Canopy-type trees shall be used as the principal street tree on each street in order to provide climate control and to visually link opposite sides of the street.



Trees provide a shade canopy and can frame a vista.

- **4.1.4** All streets in the City should be planted with street trees.
- **4.1.5** In pedestrian areas, a vertical clearance under trees of 8 feet should be maintained; over vehicle travel lanes, the clearance should be a minimum of 17 feet above the official curb grade on the street side of the tree.
- **4.1.6** Tree species should be deep-rooted so they do not buckle and break sidewalks, curbs or roadways.
- **4.1.7** Tree species which require a high level of maintenance or are prone to a weak branching structure should not be considered.
- **4.1.8** Tree species should generally be long-lived and well-suited to Livermore's climate. However, smaller ornamental or accent trees may be considered at special locations.



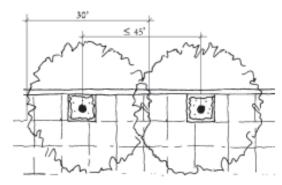
All City streets should have street trees.



Street trees enhance the character of pedestrianoriented commercial streets.

4.1.9 Tree spacing should be determined with an understanding of the mature size of the tree species involved. Minimal distance between trees is recommended to create a full street canopy. Preferably, the spacing between two trees should be equal to or less than one and a half times the diameter of the mature tree canopy.

4.1.10 Placing street trees between the street and the sidewalk is generally preferred. The separation between the street and the sidewalk creates a more visually and physically distinct pedestrian zone. Placing street trees closer to the street also decreases the perceived width of the street and allows the canopies to extend over the street toward each other.



Trees with 30-foot canopies should be planted on 45-foot centers or less.

5. Soundwalls

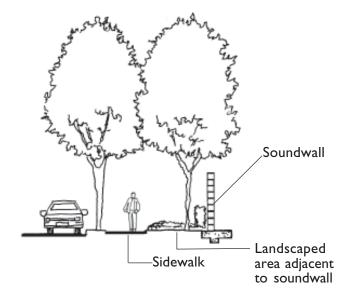
STANDARDS

- **5.1.1** Soundwalls shall be installed with a landscape element between the soundwall and the sidewalk.
- **5.1.2** The soundwall design and landscaping shall be consistent with the City's Standard Details. The landscape feature shall be a planting strip consistent with the City's backing lot treatment standards.
- **5.1.3** The landscaping shall be adequately maintained, including the installation of an irrigation system.
- **5.1.4** Backing lot soundwalls shall be articulated consistent with the City's Standard Details.



Soundwalls should be landscaped.

- **5.1.5** New soundwalls should be designed to match the height and materials of adjacent or proximate existing soundwalls unless the existing walls are substandard or undesirable in appearance.
- **5.1.6** The landscape area between the soundwall and sidewalk should include sufficient landscape materials, including trees, shrubs and ground-cover, to soften the visual impact of the soundwall.
- **5.1.7** The height and massing of the landscaping should graduate up from the street towards the wall with larger, taller plants located adjacent to the wall.





Soundwall articulated with a change in the wall plane.



Soundwall is articulated both vertically and horizontally.

6. Street Furniture

STANDARD

6.1.1 Street furniture shall be consistent with established City standards and requirements.

- **6.1.2** In order to encourage pedestrian circulation, appropriate street furniture and accessories, such as benches and trash receptacles, should be incorporated into the design of the street.
- **6.1.3** The furniture and accessories should be of a similar palette of materials and design.
- **6.1.4** All accessories and street furniture should be constructed of durable materials that will withstand the elements, public use and vandalism.



Street furniture, such as benches, encourage pedestrian activities on major streets.



Bench.



Newspaper racks.



Benches, trash receptacles and other street furniture should be incorporated into street design.

7. Bus Shelters

STANDARD

7.1.1 Shelter designs shall be in keeping with the street furniture palette and shall be approved by the Livermore Amador Valley Transit Authority (LAVTA).

- **7.1.2** Bus shelters should be provided at appropriate locations to facilitate transit use by providing places of refuge, especially during periods of rain or significant heat.
- **7.1.3** Shelter design should be compatible with the architectural design of the surrounding districts.







8. Lighting

STANDARD

8.1.1 All street lights shall conform to the City of Livermore Standard Details and Standard Specifications.

GUIDELINE

8.1.2 Street lights play a significant role in determining the character of the streetscape both at night and during the daytime. Light standards and fixtures represent highly visible elements of the streetscape. Their style and function should be determined by the type and level of illumination required and the character of the area to be illuminated.



Decorative pedestrianscaled street light installed on a curb extension bulbout.

9. Utilities

GUIDELINE

9.1.1 All above-ground utility boxes should be underground wherever possible. Where undergrounding is not feasible, this equipment should be located in inconspicuous locations and screened with landscaping and low walls.

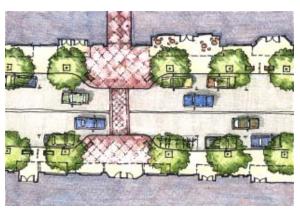
10. Curb Extension Bulbouts

GUIDELINE

10.1.1 On streets that contain parking or shoulder lanes, curb extension bulbouts are encouraged at intersections, consistent with City Engineering and maintenance requirements. Bulbouts help to lessen the perceived width of the street and also facilitate shorter crossing distances for pedestrians.



Bulbouts narrow percieved street width.



Mid-block crossing.



Corner bulbouts shorten crossing distance.