Chapter 4: Industrial and Office

This chapter contains the design standards and guidelines for development and improvement of office and industrial buildings and projects. Applicants should discuss specific zoning code requirements with the Community Development Department. 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. Standards apply in I-1, I-2 and I-3 zones. Guidelines apply especially to I-1 zones and office uses, which are held to a higher standard than I-2 or I-3 zones.

Chapter Sections

A. Goals
B. Site Planning
C. Building Design
D. Landscape Design
E. Signs
F. Lighting Design

A. Goals

The following goals set forth the basic urban design intent implicit in the design guidelines formulated for the city's industrial and office areas:

1. To encourage a harmonious development pattern that respects and responds to the character of the surrounding built and natural environments.

2. To improve the visual and design character of the city's industrial areas and dispel traditional thinking that such uses are inherently unsightly.

3. To establish standards that will enhance property values and attract high quality industry to the city.

4. To protect the visual character along major entry corridors into the city from I-580.

5. To protect the surrounding community from objectionable visual, noise, odor or vibration impacts often associated with industrial uses.

6. To promote design that improves the function of both individual developments and entire districts, and results in safe, efficient and high quality development.

7. To provide development guidelines that will encourage the development of visually cohesive and functionally unified industrial areas, while allowing enough design flexibility to encourage innovative building and site design.

8. To establish an attractive, industrial and office development character.

B. Site Planning

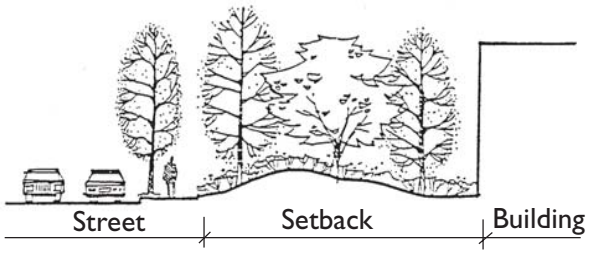
The standards and guidelines in this section are to assist in the appropriate siting of buildings in the industrial and office areas of the City. These standards and guidelines are intended to promote a superior appearance for industrial and office buildings and the functional arrangement of buildings and site components. This section also gives guidance for an appropriate level of screening for all of a building's supporting elements, such as parking, utilities and service areas.

1. Building Setback

Intent: To ensure that an appropriate aesthetic quality exists in the semi-public zones between streets and industrial buildings.

1.1 Setbacks

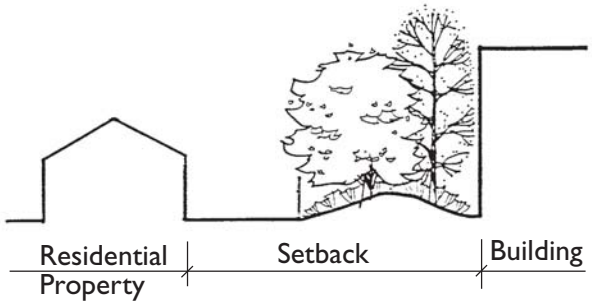
Building setbacks should be designed to give good spatial definition to the pedestrian realm on public streets.



Front yard setback facing public realm is designed to give good spatial definition.

Standard

1.1.1 Rear yard setbacks shall be consistent with setbacks established in the Livermore Planning and Zoning Code. Where the rear of an industrial use abuts an agricultural open space or residential district the landscaped setback shall be 25 feet minimum, all of which must be planted with a dense landscape to provide for transition areas between uses.



Landscaped rear yard setback screens the project from the adjacent residential district.

Guideline

1.1.2 If the building or parking lot is visible from residential areas, additional landscaping should be used to mitigate potential visual impacts.

2. Orientation

Intent: To employ the existing environmental, geographic and topographic conditions to create new development that is unique and specific to Livermore.

2.1 Views

The placement and orientation of the building on the site should preserve view corridors to scenic vistas and hillsides.

Façade preserves view to hillside in background.

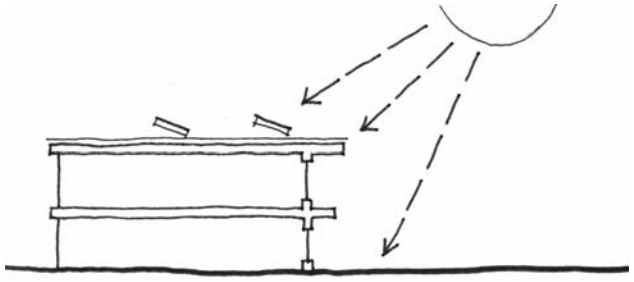
2.2 Existing Landscaping

Existing mature trees on building sites should be preserved, protected and maintained wherever possible.

Building floorplan has been designed to accomodate existing significant tree.

2.3 Solar Orientation

The placement and orientation of the building on the site should make use of solar orientation principles in order to provide natural daylight and promote lower heating and cooling requirements for the building.



South-facing façades use overhangs to provide shade.

2.4 Access

The placement and orientation of the building on the site should facilitate access to major streets and thoroughfares.

2.5 Neighborhood Context

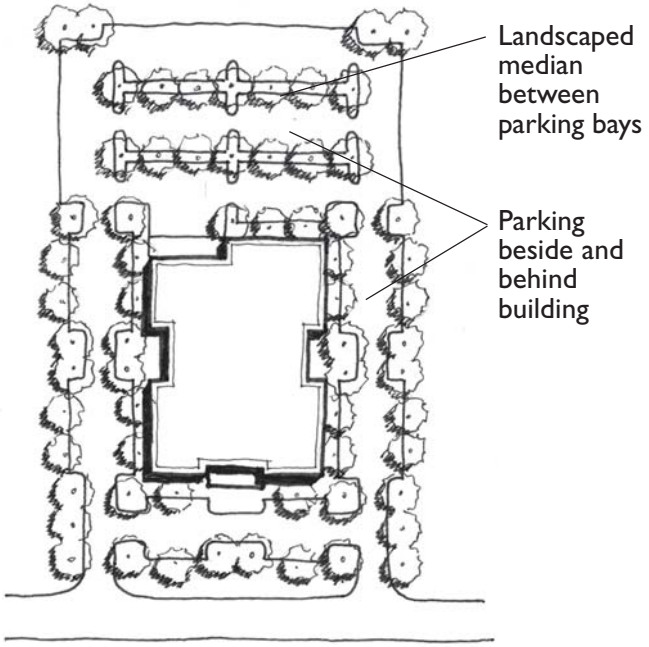
The placement and orientation of the building on the site should augment the character of neighboring development.

2.6 Site Layout

The placement and orientation of the building on the site should provide visual clues to the development's functional organization, such as the locations of service areas, public parking facilities and primary entrances.

3. Parking

Intent: To minimize the impact of large areas of surface parking on the aesthetic character desired for quality development in Livermore's industrial areas.



3.1 Location

GUIDELINES

3.1.1 In order to reduce public views of parking areas, a significant amount of a development's parking area should be located beside or behind the building.

3.1.2 All outdoor parking areas should be divided into smaller units to decrease visual impacts associated with large expanses of pavement and vehicles, and to facilitate safe and efficient pedestrian movement between parking and structures. Methods for dividing parking areas into smaller components include the incorporation of landscaped medians between parking bays when the number of bays exceeds two. These landscaped medians can include pedestrian paths.

3.1.3 A maximum distance of 300 feet from a parking space to building entries should not be exceeded.

3.2 Distribution

GUIDELINE

3.2.1 All outdoor parking areas should be divided into smaller units to decrease visual impacts associated with large expanses of pavement and vehicles, and to facilitate safe and efficient pedestrian movement between parking and commercial establishments.

3.3 Screening

Standard

3.3.1 Surface parking areas facing a public street shall be buffered by berming or landscaping.

Guideline

3.3.2 For security purposes, openings should be incorporated into the landscape design to provide clear views into the site.

3.4 Access Drives

Standard

3.4.1 Access driveways shall be sufficient in number to provide safe and efficient movement of traffic to and from a site; they should, however, be kept at a minimum to reduce the potential for interference with off-site circulation.

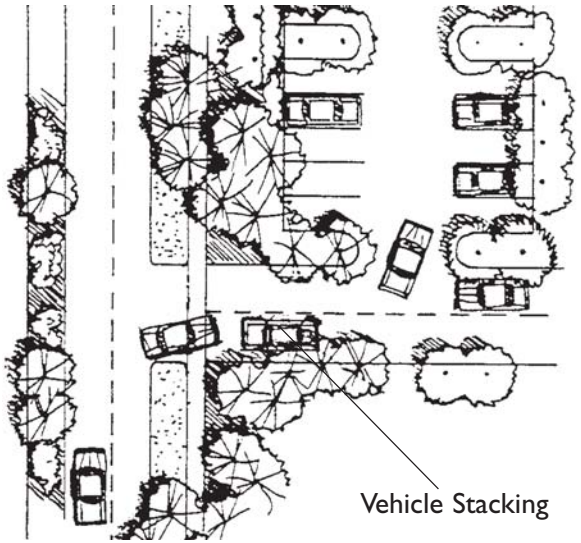
Guidelines

3.4.2 Within the site, access drives should provide sufficient length to permit vehicle stacking during hours of peak use without impacting circulation within the parking lot or on the fronting public street.

3.4.3 The number of driveways from parking areas onto the main frontage roadway should be kept to a minimum. Whenever possible access drives should connect to side streets.

3.4.4 Common access driveways are encouraged for adjacent lots to reduce the number of access points onto the main roadway.

3.4.5 Multiple-lot industrial developments should provide access to individual lots from an internal street system rather than create additional driveways along public street frontages.



3.5 Internal Circulation

Standard

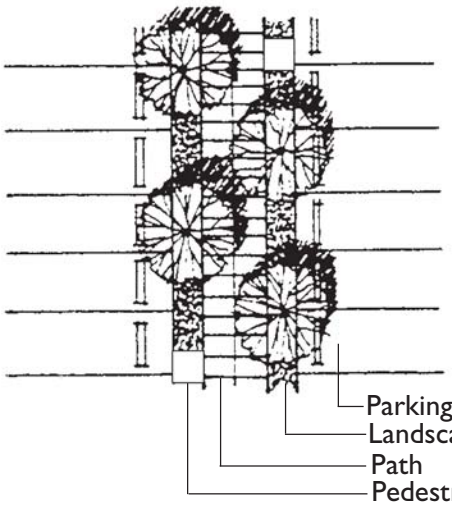
3.5.1 Parking areas shall include designated pedestrian access to building entrances.

Guidelines

3.5.2 On-site pathways which are separated from vehicular traffic should be provided for pedestrians and bicyclists and should provide connections between building entries and public sidewalks.

3.5.3 Large commercial development should include at least one separated pedestrian pathway through the parking area to the main entrance.

3.5.4 Pedestrian walkways and spaces should include elements such as special paving materials, raised curbs, trellis structures, landscaping, pedestrian-scaled lighting, seating and trash receptacles.



Landscaped shade structure provides attractive pedestrian circulation area.

Trellis structure enhances pedestrian environment.

3.5.5 Paths with durable, all-weather surfaces should be located on medians and other landscaped areas to provide convenient pedestrian routes and reduce wear on landscaped areas.

3.5.6 Primary circulation paths should avoid excessive steps or level changes in order to reduce potential tripping hazards and facilitate circulation for all potential users, including strollers and wheelchairs.

Tree-lined elevated pedestrian path separates parking bays.

3.5.7 Secure bicycle parking should be provided adjacent to building entrances. The design and materials should be coordinated with the site and building design. Whenever possible, bicycle areas should be covered and located in areas which are clearly visible to site users in order to avoid security problems.

3.5.8 Trellises and shade structures are encouraged to enhance the aesthetic design of the parking lot and to create a more comfortable pedestrian environment.

Bicycle parking near building entrance.

4. Service Areas

Intent: To minimize the impact of loading and service areas on the aesthetic character desired for quality development in Livermore's industrial areas.

4.1 Location

STANDARDS

4.1.1 Loading docks, truck doors and service areas shall not be located between the primary building and the primary street.

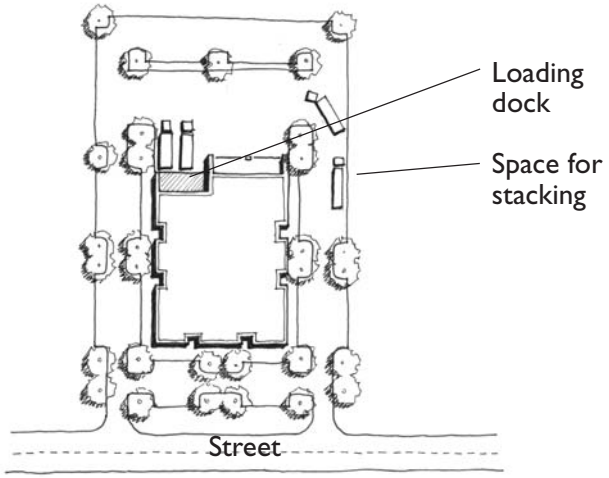
4.1.2 Any outdoor storage areas containing materials, supplies or equipment, including heavy trucks and trailers, shall be screened from public view.

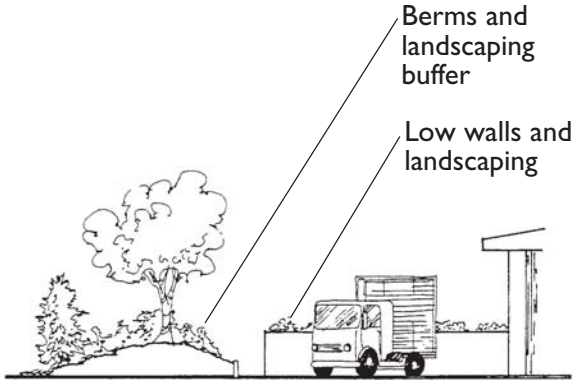
4.1.3 Loading docks, truck doors and service areas shall be screened from public view.

GUIDELINES

4.1.4 Loading docks and service areas should be located at the rear of the development wherever possible and should be separated from automobile parking areas.

4.1.5 Screening of loading docks and service areas should be integrated into the design of the building.





4.2 Access

Standard

4.2.1 Loading areas shall be located so that trucks that are being loaded or unloaded do not disrupt the smooth flow of traffic within the project area.

Guideline

4.2.2 On-site space for stacking vehicles waiting to load or unload should be provided as necessary.

4.3 Refuse Areas

In addition to the Design Standards and Guidelines provided below, applicants should refer to the City of Livermore Standards and Guidelines for Solid Waste and Recycling Container Enclosures, available at the Community Development Department.

Standards

4.3.1 Trash enclosures shall be of sufficient size to house the number and size of trash bins and containers needed to accommodate the waste generated by the building user, including trash, cardboard, cans and bottles, food waste, green waste and other recyclables, as required by the City's Solid Waste Ordinance and Livermore Planning and Zoning Code requirements.

4.3.2 Trash bins shall be located within a trash enclosure at all times.

4.3.3 Trash enclosures shall be located away from public view.

Trash enclosure continues façade design of adjoining building.

4.3.4 Trash enclosures shall be integrated into the site plan to accommodate truck access, landscape screening and an adequate number of trash bins.
4.3.5 Trash enclosures shall be constructed of durable materials and the color, texture and architectural detailing shall be consistent with the overall site and building design.

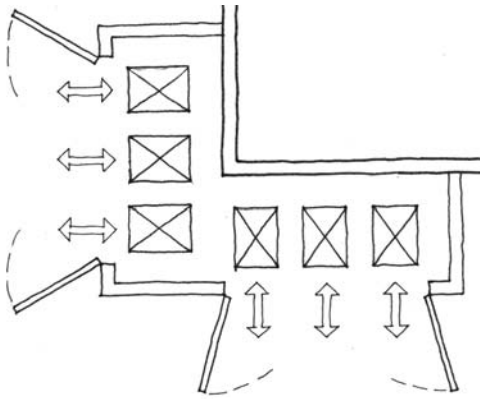

Screening is built of durable material.

Guidelines

4.3.6 Trash enclosures should be located away from adjacent parcels to minimize noise and odor impacts typically associated with garbage collection and storage.
4.3.7 Screening of the trash enclosure should be integrated into the overall site and building design. Screening should be constructed of durable materials. All structural screening should be supplemented with landscaping.
4.3.8 Roofs of enclosures should be designed to complement the project buildings' roof style and colors.
4.3.9 A building wall may be used as one side of a trash enclosure.
4.3.10 Enclosures should be located and designed to facilitate users' convenience. Person doorways should be provided in addition to the gate opening.


Enclosure roof design complements the roof design of the primary building.

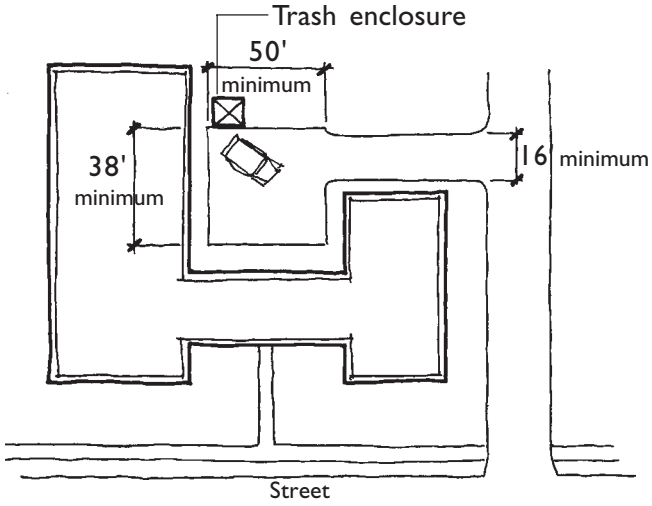
4.3.11 Trash enclosures should be designed so that each bin can be removed and replaced without requiring the removal of other bins, to avoid stacking and to maximize access.
4.3.12 Enclosure gate openings should extend the width of the enclosure with no single gate opening less than 9 feet in width. The dimension of opened gates should allow adequate clearance of approximately 18 inches clear on either side of bins for mechanized truck access or manual maneuvering of bins.
4.3.13 Where trash compactors are used, they should be screened from public view within a trash enclosure or within the building volume.
4.3.14 Where trash compactors will be utilized, the trash enclosure should be enlarged to accommodate the space for required trash bins as well as the trash compactor. Trash compactors may not displace space required for trash bins.
4.3.15 Trash compactors should not block access to standard trash bins or interfere with standard trash enclosure operation.
4.3.16 A smaller number of larger gate openings should be designed, rather than a larger number of small gate openings.
4.3.17 Heavy duty doors should be used. The use of wheels under the doors to increase the durability of gate hinges should be considered.
4.3.18 A concrete pad inside enclosures should be included to prevent damage to ground surfaces from filled containers. The pad should extend 10 feet in front of gates.
4.3.19 If security lighting is needed, a minimum one-foot candle at ground level should be designed, integrated into the site design, shielded and located as low to the ground as possible.
4.3.20 Enclosure doors should face an approach drive aisle where possible.



Trash enclosure lay-out allows bins to be removed independently.

Minimum nine-foot wide opening for trash enclosures.

4.3.21 Driveways or travel aisles leading to trash enclosures should be a minimum of 16 feet wide with a 50-foot deep approach.
4.3.22 In trash collection loading areas, the minimum overhead vertical clearance should be 22 feet to accommodate loading operations.
4.3.23 Where no through-route exists for trash removal trucks, the turn-around area should be a minimum of 38 feet square in front of the enclosure.
4.3.24 Trash collection should be accessed from a side street, alleyway or parking area, to avoid collection trucks needing to maneuver on busy roadways.



4.4 Utilities and Backflow Preventers

Standards

4.4.1 Utility cabinets and meters shall be contained within the building or otherwise fully screened.
4.4.2 Backflow prevention devices shall be fully screened from public view through the use of landscaping, berms, low walls or other screening techniques.
4.4.3 All required design and screening elements shall be shown as part of the site plan submittal.

Guideline

4.4.4 Developers should use alternative designs for backflow prevention devices that are least obtrusive. Components should be painted to match the adjacent landscaping.


Backflow preventor screened by landscaping and low wall.

C. Building Design

The standards and guidelines in this section give design guidance for the architectural components of industrial and office buildings.

1. Architectural Character

Intent: To ensure that building design provides for development that enhances the character of industrial development areas of the city.

Industrial/Office building of high quality design.

Guidelines

1.1.1 Industrial development should include a variety of building types and designs in addition to the concrete tilt-up type construction which is often used.

1.1.2 All industrial development is required to provide quality architectural design; however, office uses, and industrial uses in the I-1 (Research and Development) Zoning District should provide even greater quality and architectural interest in their building design.

2. Massing

Intent: To ensure that buildings with industrial uses, particularly larger structures, are designed to a human scale and achieve variety in the building massing.

2.1 Scale

Standards

2.1.1 Buildings shall be designed with elements that relate to the human scale and incorporate two or more of the following components:

a) Outdoor patios for passive or active recreation.

b) Awnings, overhangs, trellises.

c) Changes in building massing (e.g. change in wall planes or varying height).

d) Changes in building materials and colors.
e) A defined building façade that delineates the base, middle and top of the building.

2.1.2 Unbroken façades in excess of 100 feet, without changes in wall planes, shall be avoided.

2.1.3 Changes in the façade plane shall be employed to add shade and shadow patterns that will render the façade more interesting and aesthetically pleasing.

Façade steps back to break up building mass.

Guidelines

2.1.4 Exterior building walls should be varied and the façade articulated to achieve human scale in building design by at least one of the following means:
a) Change in plane of at least 2 to 3 feet.
b) Change in elevation that incorporates the building's massing.
In addition, exterior building elements such as buttresses, trellises or entries should be incorporated that break up the plane of the building.

2.1.5 Spaces created by varied building plane offsets should accommodate landscaping or areas for employee use.

Building mass is broken down into various volumes.

Landscaped building setbacks.

2.2 Proportion

Standard

2.2.1 Buildings shall have a clearly defined base, middle and top.

Guidelines

2.2.2 The base of a building should be defined by appropriately contrasting material or color.

2.2.3 A building should appear heavier at the base than at the top so that it appears to be firmly grounded and not top heavy.

2.2.4 Large buildings should be broken into smaller components that share an architectural relationship and establish a human scale for the building.

Rusticated stone gives emphasis to base.

3. Façade

Intent: To ensure that all building façades that can be viewed from a residential district or publicly accessible area are articulated to add visual interest, distinctiveness and human scale.

3.1 Rhythm

Guidelines

3.1.1 Façades should incorporate structural or design elements to break wall expanses into smaller parts. Windows, doors and other openings should be incorporated into this rhythm.

Window openings, columns and color scheme define a building rhythm.

3.1.2 Vertical breaks may be structural elements such as columns that define a rhythm, windows openings or façade components that are recessed or enhanced.

Rhythm can be emphasized by window openings, enhanced façade components and color.

3.2 Projections

Standard

3.2.1 The type, form, material and color of all building projections, including awnings, trellises and canopies, shall be consistent with the overall building design.

Guidelines

3.2.2 Awning shape should be conducive to the design of the building. Shed-shaped, rather than barrel-shaped, awnings should be used.

3.2.3 Awnings should be constructed of a durable material, such as canvas or metal, rather than vinyl.

3.2.4 Building projections, such as awnings and trellises, should relate to the architectural design of the building façade and avoid running the entire length of the façade.

Canopy emphasizes building entry and utilizes materials consistent with building design.

4. Architectural Detailing

Intent: To ensure that buildings with large façades incorporate design elements and details that relate to the scale of the human form. These design elements should be faithful to the overall architectural theme of the building.

4.1 Design Details

Guidelines

Building designs should include the following guidelines to help break larger buildings into smaller-scaled components:

4.1.1 Enhanced entry elements or entry plazas may break long façades into smaller components.

4.1.2 Atriums and interior courts connected through to exterior façades may create points of interest.

4.1.3 Upper floor setbacks may break a façade into smaller components and present a less dominant presence on a parcel.

4.1.4 Dynamic building and roof forms may create greater visual interest and variety.

4.1.5 Cornices, parapets and eaves can denote the top of a building and provide greater visual interest on tall façades.

4.1.6 Awnings, balconies and trellises may break up long façades and provide a place for employee-related activities.

4.1.7 Distinctive window patterns may provide greater visual interest on large façades.

4.1.8 Accent lighting may provide greater visual interest on façades at night and can be integrated architectural components of a building.

4.1.9 Landscaping components may help to mediate the transition between setback areas and adjacent large façades.

Canopy over building entry.

5. Windows and Doors

Intent: To ensure that openings in the façade contribute to the overall design of the building and promote a relationship to the scale of the human form.

5.1 Window Proportion

Standard

5.1.1 All building windows shall have a proportional relationship and shall be consistent with the design of the building façade.

Guideline

5.1.2 Window proportions should be part of an overall design concept and should generally be vertically oriented.

Windows are part of the overall building design and proportionally related to each other.

Window design and sun screening add complexity and interest to a building's façade.

5.2 Window Detailing

Guidelines

5.2.1 Recessed windows are strongly encouraged.

5.2.2 Window frames should be inset a minimum of 4 inches.

5.2.3 Other means of accenting the windows, such as built-up window trim and sills, should also be considered to create shadows and depth on the façade.

Window detailing features an inset and built-up window trim and sills.

5.3 Window Materials

Guidelines

5.3.1 Mirrored glass should only be accepted if it is used as an important architectural element or captures views to the outside that help to define placemaking qualities specific to Livermore.

5.3.2 Clear or lightly tinted glass is preferred.

Successful use of mirrored glass.

5.4 Building Entries

Standard

5.4.1 Building entries shall be emphasized by changes in building mass, building height, or both.

Guidelines

5.4.2 Building entrances may be further articulated by integrating their design with other architectural features, such as canopies, appropriate to the architectural style of building.

High quality canopy design articulates entrance.

Entrance is articulated with change in color and material and with design of canopy and podium.

Changes in mass articulates building entrance.

5.4.3 Architectural detailing and materials should be used to distinguish the hierarchy between primary and secondary building entries.

5.4.4 Building entries should include human scale elements.

5.5 Doors

Standard

5.5.1 Doors at building entrances shall include windows that permit views into the establishment.

Guideline

5.5.2 Doors at building entrances with windows on the façade should match the materials, design and character of the adjacent window framing. High quality materials such as crafted wood, stainless steel, bronze and other ornamental metals should be considered.

Entrance permits views into building and door design matches window design.

6. Colors and Materials

Intent: To ensure that all colors and materials enhance the overall design of the building and are compatible with the surrounding natural and built environment.

Bold colors help to demarcate building entry.

6.1 Colors

Standards

6.1.1 Exterior building colors shall be compatible with the surrounding natural and built environment.

6.1.2 Building color shall not be such that it serves as signage or business identification.

GUIDELINES

6.1.3 Primary colors or other bright colors should generally be used only as accents to compliment and enhance the architectural design.

6.1.4 Repetition and over reliance on a single approach to the use of color such as multiple horizontal stripes or bands should be avoided.

6.2 Materials

GUIDELINES

6.2.1 The use of a variety of related or appropriately contrasting materials is encouraged within the design theme of the building. These can include:

- Concrete, smooth or textured
- Concrete masonry unit (CMU) blocks, plain or rusticated
- Exterior plaster stucco

6.2.2 Use of accent materials, such as stone, metal, bricks or wood, should be used on all visible façades of the building, not just the front of the building.

Façade with contrasting materials and textures.

7. Roof

Intent: To ensure that form, color and texture of the roof is designed as an integral part of the overall building design.

7.1 Form

Guideline

7.1.1 Sloping roof forms are encouraged.

7.2 Materials

Guideline

7.2.1 Reflective roofing materials should not be used on visible roof surfaces.

High quality and architecturally integrated roof design with slightly set back parapet.

Roof cornice design consistent with overall architectural language.

Sloping roof forms are encouraged.

7.3 Detailing

Standard

7.3.1 Roof cornices, where employed, shall be consistent with the overall building design.

Guidelines

7.3.2 Changes in parapet height should relate to a change in the building's massing and should be incorporated into a distinct building volume, rather than create a higher "false" façade.

7.3.3 Where a parapet extends a façade plane higher, it should return from the façade plane to define a three dimensional building volume.

7.3.4 Perforations in the parapet to facilitate roof drainage and downspouts should be designed so as to be consistent with the architecture of the building.

Parapet perforation for rainwater downspouts used as architectural feature.

7.4 Rooftop Equipment

Intent: To minimize aesthetic impacts to neighboring parcels created by HVAC and other building equipment located on rooftops.

Standards

7.4.1 All mechanical and electrical roof-mounted equipment shall be fully screened from public view by means that are architecturally integrated into the overall building and site design.

7.4.2 Plans submitted for design review shall indicate how roof-top equipment will be screened.