URBAN DESIGN

Urban design in Mission Valley is a process of identifying the form and function of the community and recommending guidelines for future development which will enhance that form and function, and tie the various components of the community together. There are two functional categories which will require special design considerations: 1) design protection areas (river, hillsides, landmarks); and 2) transportation corridors (freeways, streets, light rail transit). These categories are analyzed from a Valley-wide perspective.

DESIGN PROTECTION AREAS

San Diego River

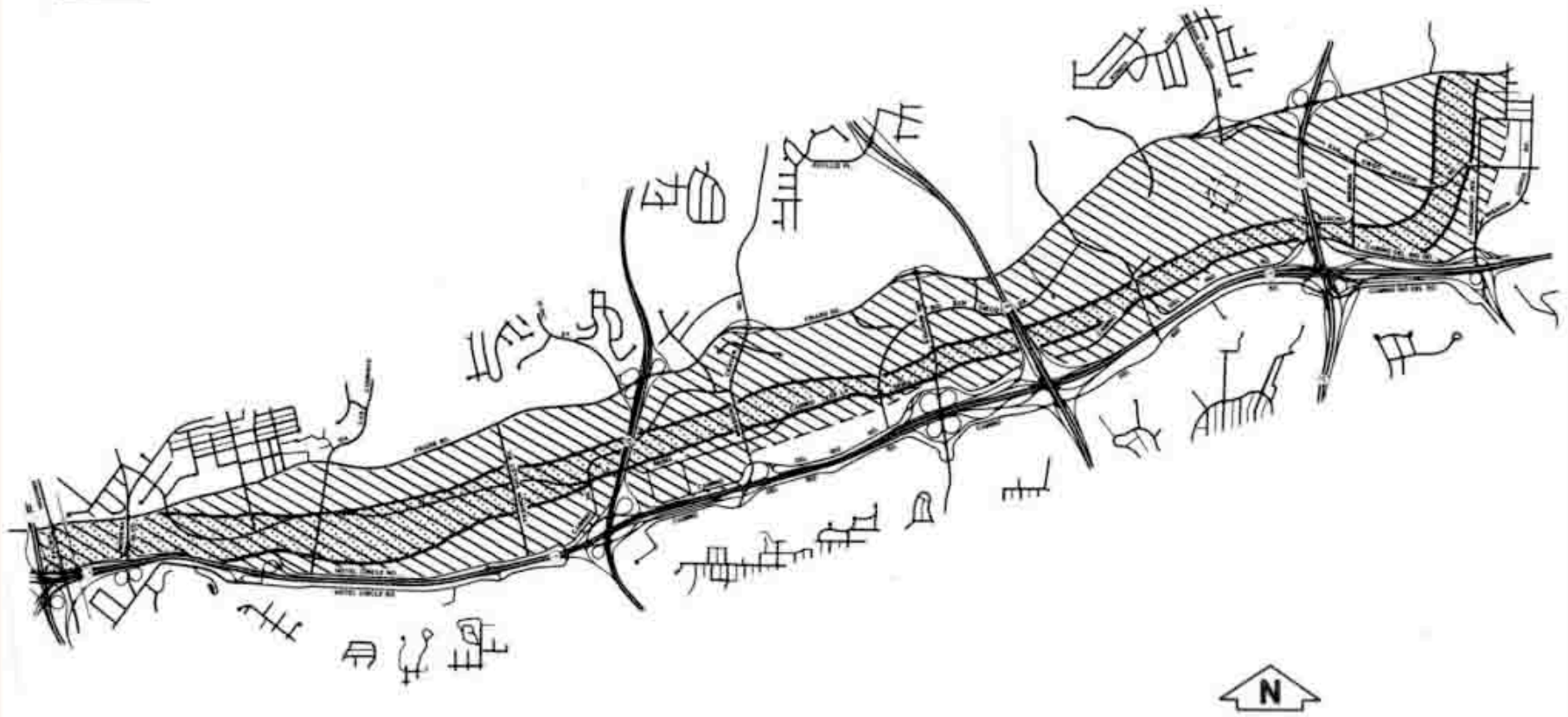
The river is the natural ribbon which ties the community together. It serves as a community identifying characteristic and as an aesthetic resource, providing a natural and pleasant setting for a variety of uses. The river is a key component of design in Mission Valley. It contributes to the linear quality of the community.

The areas immediately adjacent to the river corridor will require sensitive design treatment in order to relate development on either side of the river to each other, and to tie together developments up or downstream. To promote the river as the focus of activity, development (new and existing) should orient toward the river. Visual access (views) should also be maintained from public roads and other development.

Development projects could be designed with appropriate scale relationships between buildings and the adjacent open space features. The buildings should terrace or step down to the river corridor area. Parking and entrances should be located along access roads, leaving pedestrian areas and landscaping along the river. Setback requirements should be sufficient to provide a gradual transition between open space and development.

Visual and physical access to the river corridor are equally important design issues. Buildings should be sited so as to provide and/or maintain views of the river from public roads, the freeways, the mesas on either side of the community, and to maintain views across the river. Pedestrian access should also be encouraged along the river corridor. It can be in the form of paths, rest areas, jogging trails, or observation areas. Transit lines should run parallel to the river. They may be located within the buffer area, but should be separated from the river by some vegetation.

Because of the complexity of the river corridor issues, the development guidelines are divided into the following major categories: Flood Protection, Wetland Natural Habitat Conservation and Enhancement, Buffer Areas, Passive Recreation Areas, Open Space, View Enhancement, and Architectural Massing Considerations.



Urban Design–San Diego River
Mission Valley Community Plan
30 FIGURE

DESIGN GUIDELINES

Flood Protection

- The 100-year floodway zone protection should be maintained within the valley. The existing floodway zone line should be updated to carry the 100-year 49,000 cfs flood projected by the Army Corps of Engineers based on the river basin's buildout.

- Opportunities for modifying and realigning the existing floodway zone through construction of a man-made channel may be considered, as long as the channel is designed to carry the projected 100-year 49,000 cfs flood in a natural appearing facility. Additionally, this new facility will be required to implement the policies of the Wetlands Management Plan (**Appendix G**) and the urban design guidelines for riverfront development included in this section of the Plan. The new facility will be required to maintain a constant water flow velocity and provide erosion protection throughout its length.

- If modifications to the existing floodway zone are proposed on a project-by-project basis, the new project will be required to maintain existing safe water velocities and property values for adjacent properties.

Wetlands Natural Habitat Conservation and Enhancement

- The floodway should be designed as a natural appearing waterway with rehabilitation, revegetation and/or preservation of native wetland habitats. Open water, freshwater marsh areas, riparian woodlands, buffer areas and passive recreation areas should be designed in concert so as to form a complete open space system along the river.

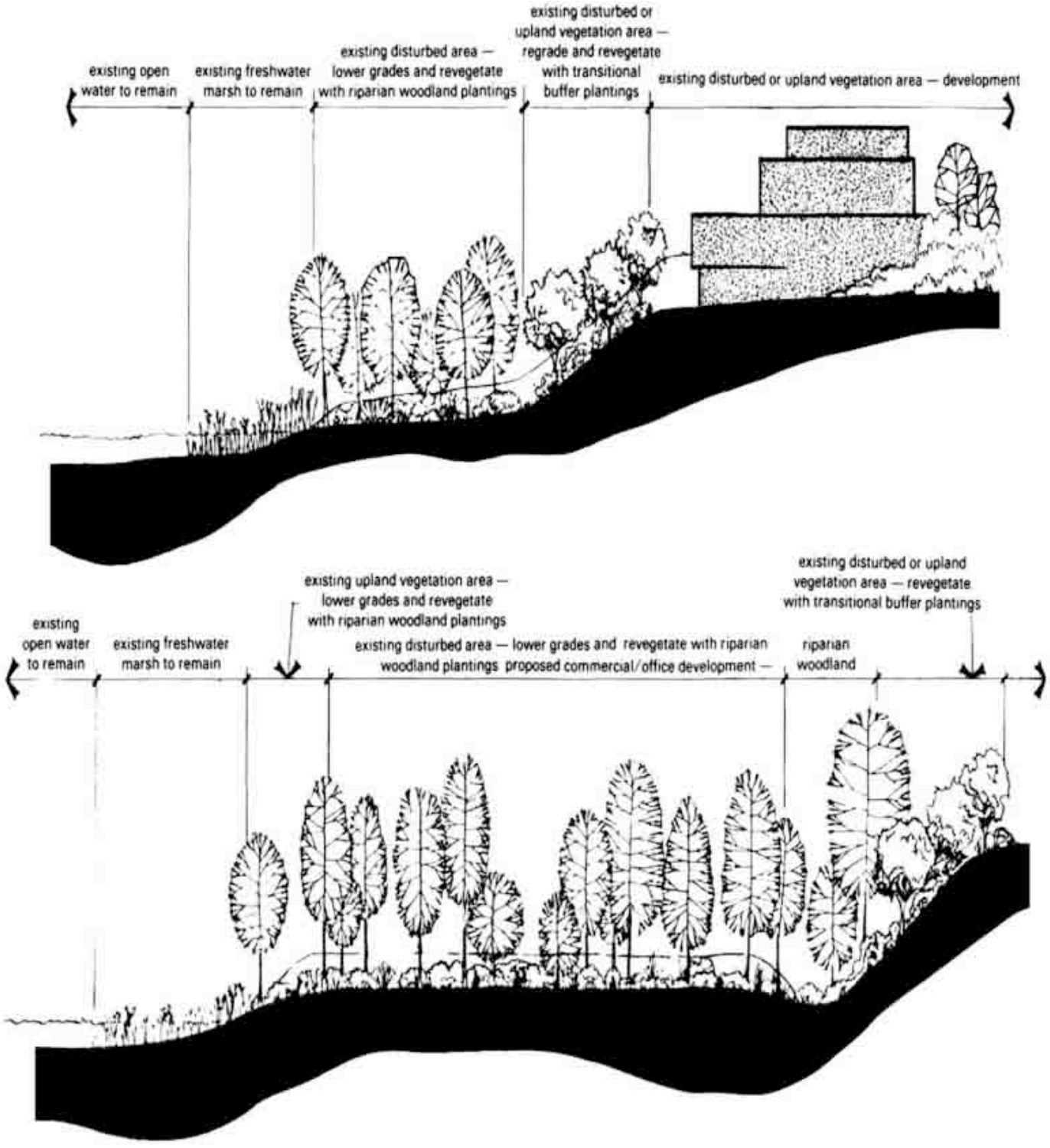
- Natural environmental features should be preserved and recreated within the floodway proper and should be incorporated as much as possible in areas beyond the floodway boundary to maintain and enhance the habitat and aesthetic values of the river.

- When rehabilitation and recreation of the floodway-wetlands habitat is considered, open waters may become more extensive because of groundwater sources, although the water level will fluctuate with the seasons. Freshwater marsh vegetation will occur adjacent to and within water areas. Riparian woodlands should generally be located on the floodway slopes and on islands that may be created within the floodway. Woodland canopies should extend beyond the floodway into the private development area. A continuous revegetation corridor should be developed along both sides of the river. (For information on revegetation materials see **Appendix G**.)

Buffer Areas

- Buffer areas are to be located along the entire length on both sides of the river. Private development shall not intrude into the floodway.

- The average width of the buffer for the entire length of the river area shall not be less than 20 feet. Maximum buffer widths should be at least 50 feet. A minimum buffer of ten feet should be assured.


existing open water to remain
existing freshwater marsh to remain
existing disturbed area — lower grades and revegetate with riparian woodland plantings
existing disturbed or upland vegetation area — regrade and revegetate with transitional buffer plantings
existing disturbed or upland vegetation area — development
existing open water to remain
existing freshwater marsh to remain
existing upland vegetation area — lower grades and revegetate with riparian woodland plantings
existing disturbed area — lower grades and revegetate with riparian woodland plantings
proposed commercial/office development —
riparian woodland
existing disturbed or upland vegetation area — revegetate with transitional buffer plantings

- Buffer areas should be widest adjacent to the most sensitive habitat areas.

- Buffer areas should be planted with a combination of native trees, primarily riparian woodlands species and native shrubs of the coastal sage scrub community (**Appendix G**).

- Land uses within the buffer areas should include only the LRT Corridor, bikeway and pedestrian lanes and other passive recreation uses. LRT encroachments into buffer areas should take place in the wider sections of the buffer.

Passive Recreation Areas

- Passive recreation facilities should be provided along the floodway, including picnic areas, benches, viewing areas, pedestrian and bicycle lanes, and other recreational activities such as a par course (exercise stations). These activities may take place within the 100-year floodway only in those areas where they avoid contact with the more sensitive wildlife habitat areas.

- Active recreation areas that may be developed within a project should be located away from the river and buffer areas, but should be visually and/or physically linked to the river corridor's passive recreation facilities.

Open Space

- The river corridor is the dominant open space feature of the Mission Valley community, and is an important part of the San Diego River and the citywide open space systems. As such, it should be accessible to the public.

- Areas outside the river channel and riparian corridor should be landscaped and linked to the river corridor. The landscaping should be consistent with the native species in the river (see **Appendix G**).

- Private project recreational and urban plazas should be linked visually and/or physically to the river corridor in order to integrate them into the area-wide open space system.

- Public roadways directly linking the river to other portions of the community should be landscaped with trees native to the rivers and valley's ecosystem. Riparian woodland type of trees or drought-resistant and fast growing species should be used (see **Appendix G**).

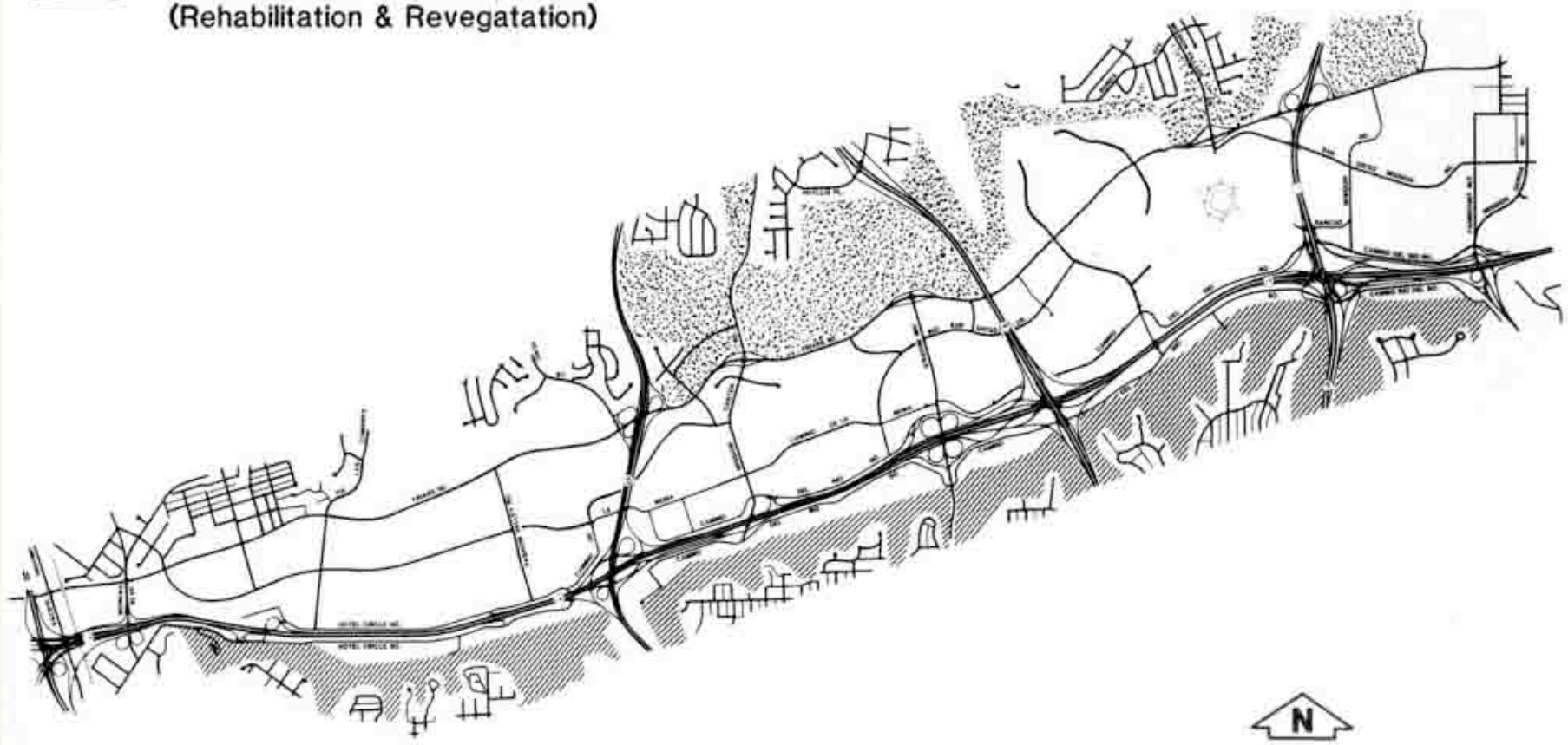
View Enhancement

View considerations in relation to the river corridor are of two types. First: ground level views from public areas such as roads. These views primarily affect the siting of buildings. Second: aerial views from the hillsides into the river area and from public areas such as parks and roads in surrounding communities. These view considerations primarily affect the desired height and bulk of buildings. The following guidelines are designed to address the view quality issues:

LEGEND

NORTH FACING SLOPES
(Conservation)

SOUTH FACING SLOPES
(Rehabilitation & Revegetation)



Urban Design–Hillsides
Mission Valley Community Plan
31 FIGURE

- Generally, ground level view corridors into the river corridor should be provided from public streets. This will require spacing between buildings and development of landscaped areas in relation to river view corridors.

- Curving streets provide special view qualities and are desirable when establishing view corridors. All development should be set back from these view corridors and landscaped see-through areas should be provided.

- To allow see-through at pedestrian levels, landscaping materials should include patterned paving and tall-canopied trees.

- In order to provide visual openings and pedestrian scale along the river, buildings or portions of the buildings nearest the river should be of lower profiles with building heights increasing as distances from the river increase. High-rise structures should be kept back from the river.

- Because of the view impacts of large low-rise buildings as seen from above, roof areas should be carefully designed to enclose mechanical equipment. Projects should also consider the development of roof forms and the use of roof materials that will have positive visual impacts by providing color and pattern. Strong consideration should be given to the use of roofs for recreation, such as terraces and landscaped parklike areas, in conjunction with project recreational activities or commercial activities such as restaurants.

- Private development should be designed with thought given to the creation of landmarks, which provide focal points and better visual orientation. Landmark qualities can be established through the development of vertical building elements, such as towers, and other special building forms, such as “campaniles,” domes or other similar structural forms. These architectural forms are particularly applicable to urban centers in commercial developments which are the focal points of activity in the community.

Architectural Massing

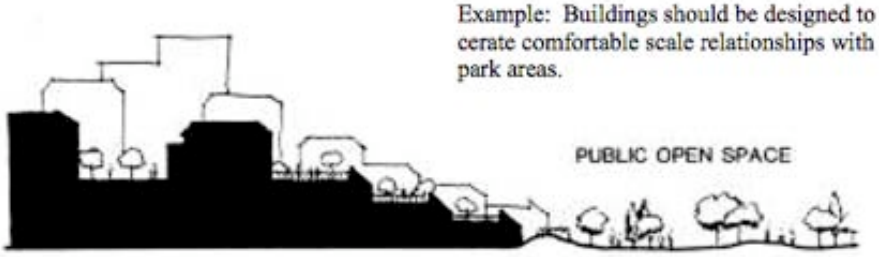
- Development should orient towards the river.

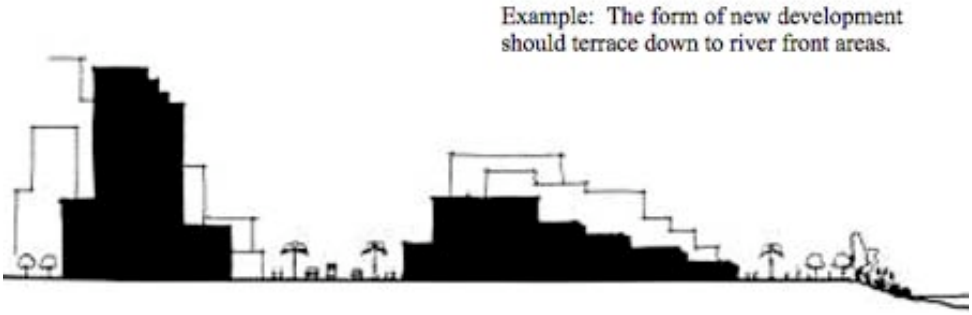
- Development should be designed with appropriate scale relationships between buildings and adjacent open space features.

- Buildings should terrace or step down to the river corridor area.

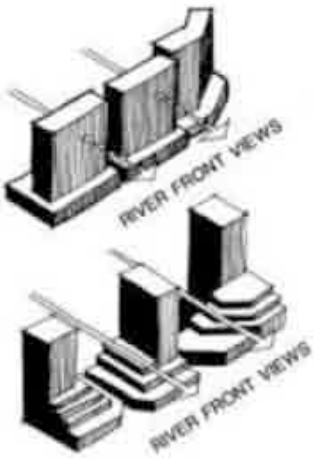
- Parking areas and automobile access into development should be located along non-river frontage access roads, with wide pedestrian areas and landscaping located along the river.

- Building setback requirements should be sufficient in depth to provide a gradual transition between open space and development. Tall buildings will require larger setbacks than shorter buildings.

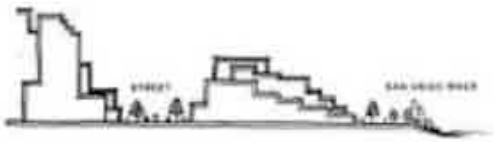




Development projects should be designed with appropriate scale relationships between buildings and adjacent open space features.



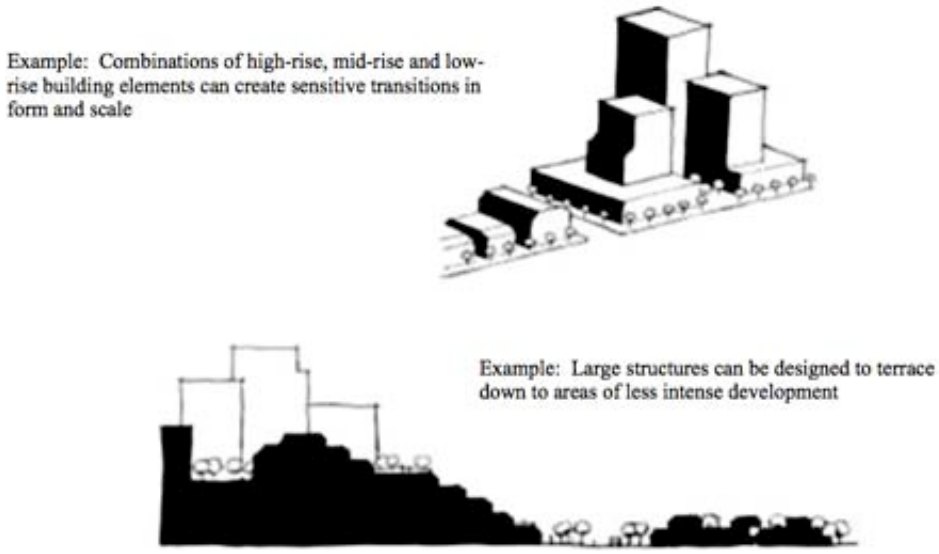
Example: Large developmental projects can be sensitively designed to avoid forming a "wall of development" that restricts views from surrounding areas. This is particularly important when considering development nearer to the river.



BUILDING FORMS SHOULD TERRACE DOWN TO RIVER FRONT AREAS

VIEWSHEDS ACROSS THE RIVER SHOULD BE MAINTAINED OR ENHANCED

As development proceeds, existing views of the natural environment should be preserved and enhanced and new views should be created. The objective is not to provide panoramic views but to create urban views that are derived from relationships between the built environment and natural features of the area.



Design structures to create transitions in form and scale between large buildings and adjacent smaller buildings or areas of less intense development.

- Buildings should be sited so as to provide and/or maintain views of the river from public roads, the freeways, and the mesas on both sides of the valley, while maintaining views across the river.

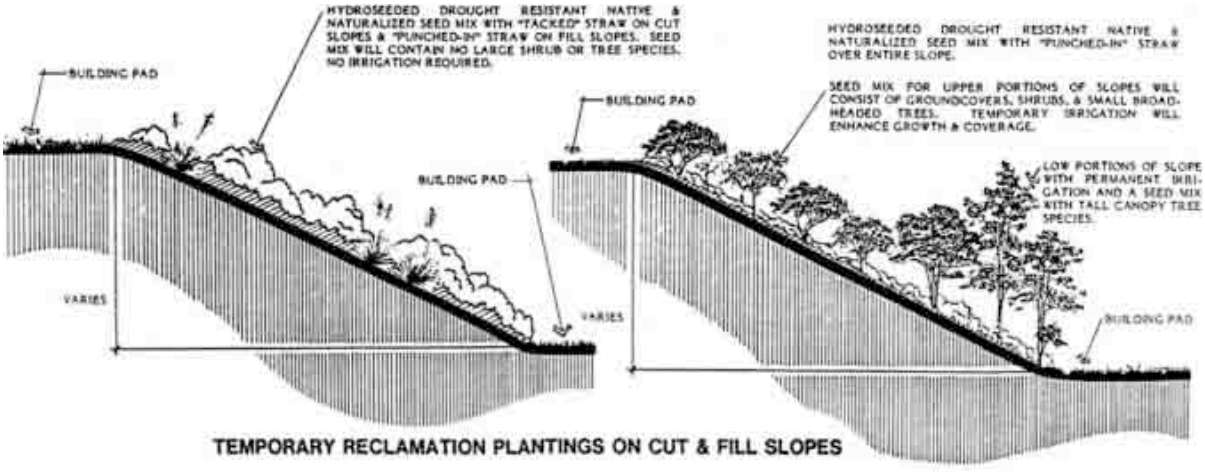
- Building materials and design should enhance the aesthetic and biological value of the river. Reflective materials should not be used in the areas immediately adjacent to the floodway.

- Outdoor lighting in projects adjacent to the river corridor should be "directed" rather than "general" and should not illuminate native habitat areas except as required for public safety.

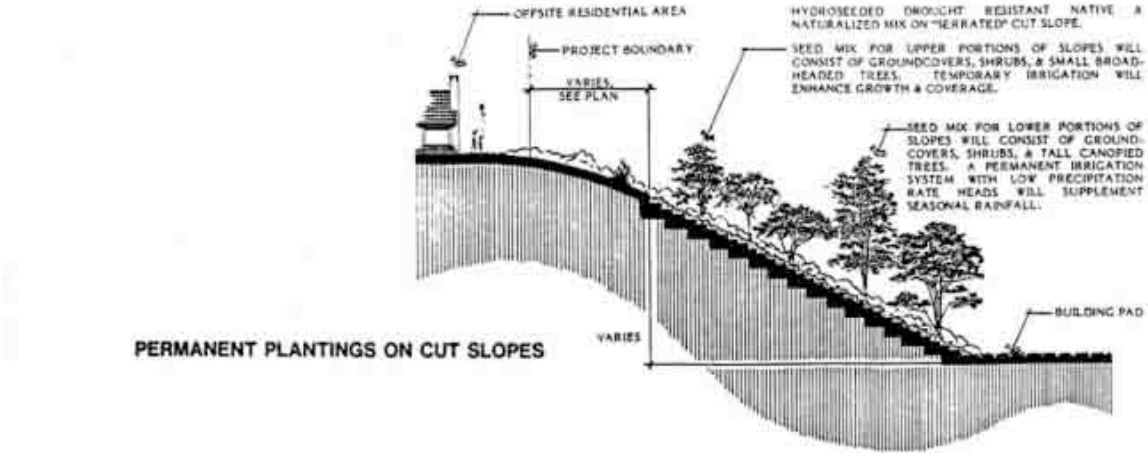
- Large development projects should be sensitively designed to avoid forming a wall of development that restricts views from surrounding areas. This may be accomplished by requiring greater setbacks for upper floors.

Hillsides

The hillsides (or valley walls) define the edges of the community. They also contribute to the form and linear quality of the Valley. The southern slopes are a continuous green edge, providing both relief from the urban development, and a buffer separating the floor of the valley and the mesa communities above. The shape of the slopes also provides design constraints for development at the base, either as a backdrop or a basis for the creation of compatible forms. The northern slopes on the other hand need to be re-contoured and rehabilitated. Design guidelines have been developed separately for the south and north slopes.



TEMPORARY RECLAMATION PLANTINGS ON CUT & FILL SLOPES



PERMANENT PLANTINGS ON CUT SLOPES

DESIGN GUIDELINES

South Slopes

- The existing natural slopes should be preserved. Development should use the slopes as a backdrop and as a guide to building form. By clustering, contouring and terracing structures into the site, the form of the slopes can be preserved.
- Development should be clustered in portions of the slope that have already been disturbed or that are sparsely vegetated, in order to maintain a greater portion of the area in its natural state.
- All hillside areas left in natural state should be maintained in a dedicated open space easement.
- Automobile access should be carefully designed to provide the minimum possible disruption of the hillside. When necessary to avoid excessive grading, automobile access should be located adjacent to street access and separated from the habitable building sections. The linkages from the street to the building should be made through pedestrian ways, bikeways, etc., which may be easier to incorporate into a hillside condition.
- All hillside graded areas should be revegetated with native local flora (see **Appendix F**).

North Slopes

- Regraded areas should maintain a slope ratio of 2:1. Grading should be sculptured in an effort to recreate natural slopes and contours.

- Slope areas should be seeded with native local vegetation (see **Appendix F**).

- Development should occur at the base of the slope in order to leave the slope area to mirror the greenbelt effect of the southern hillsides.

- When development occurs beyond the base of the hillsides, in the terraces formed by the recreated grading, the development profile should be very low.

- Buildings and parking areas should be adapted to the terrain. This includes the terracing of buildings either up or down a slope. In addition to providing views and terraced outdoor "deck" areas, the visual impact on the slopes is minimized.

- Variable slope gradients are encouraged in reconstructed slope areas.

- In general, sharp angular forms should be rounded and smoothed to blend with the natural terrain.

- During construction, measures shall be taken to control runoff from construction sites. Filter fabric fences, heavy plastic earth covers, gravel berms or lines of straw bales are a few of the techniques that should be considered.

- Grading shall be phased so that prompt revegetation or construction can control erosion. Only those areas which will later be resurfaced, landscaped or built on, should be disturbed. Resurfacing of parking lots and roadways should take place as soon as possible and not wait until the completion of construction.

- Graded slopes shall be promptly revegetated with groundcover or a combination of groundcover, shrubs and trees. Hydro-seeding may substitute for container plantings. Groundcovers should have moderate to high erosion control qualities (see **Appendix F**).

Landmarks

Community landmarks such as the Presidio (Serra Museum), Mission San Diego de Alcala, San Diego Jack Murphy Stadium, and the Jack Schrade Bridge (I-805) establish areas that require special design considerations. These landmarks provide a community identity and, as such, they should remain highly visible.

DESIGN GUIDELINES

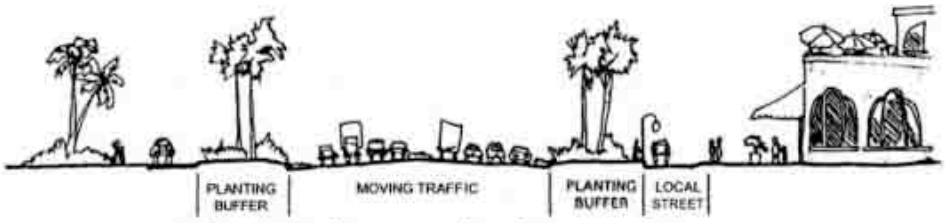
- New development located nearby should complement the landmarks, and should be sited so as not to hide them from view. Special development considerations should be established within the landmark view sensitive areas of the Plan.

- Development near the Mission should be low in scale and complementary to the Spanish period architecture.

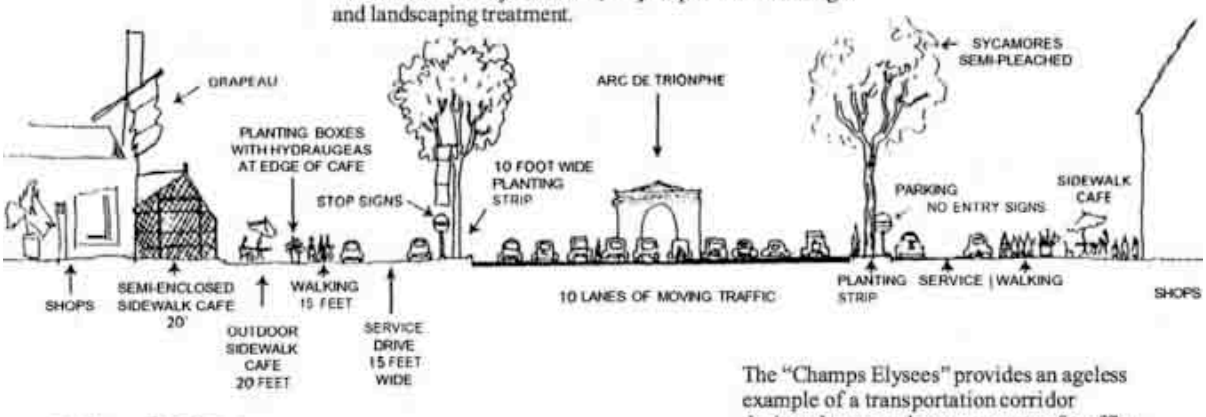
- Development near the Jack Schrade Bridge should use the bridge to frame the project, perhaps even incorporating some of its form into the design of new buildings

- Development surrounding the San Diego stadium should maintain view corridors and landscaped areas to enhance the views into this major civic and architectural landmark.

- The gateways, or entrances into the community are another type of landmark. Being crisscrossed by regional freeways, Mission Valley has many of them. Each should provide a clear view into, as well as through the community. New development located at these entrances will also become community landmarks, and should be designed with that thought in mind.



Freeway interchanges are sculptural entrances and gateways into the community. As such, they require careful design and landscaping treatment.



Freeways should be buffered with planting. Selection of planting is critical to insure visibility, provide micro-climate relief and a sense of "ambiance," to enhance the daily human experience.

The "Champs Elysees" provides an ageless example of a transportation corridor designed to carry large amounts of traffic, with frontage roads providing additional local service. Additionally; the design, and landscaping provide opportunities for the development of urban activities on both sides of the corridor. The design provides; 1. Spatial relationships to the main road; 2. Mitigation to micro-climatic problems resulting from the development of large paved areas; 3. Provision of an environmental setting encouraging human activity and enjoyment; 4. The "Arc de Trionphe" gives the final touch of monumentality and historical place. Properties throughout the I-8 corridor have the same potential.

TRANSPORTATION CORRIDORS

Transportation corridors, particularly in Mission Valley, are not only functional, but they contribute to the overall character of the community. In the Valley, they also function as a major user of land. As such, it is important that they make a positive contribution to this linear community. These corridors include freeways, major roads, local streets, and transit lines. Pedestrian walkways are also included as a transportation corridor with special design needs.

Freeways

The typical engineering function of the freeway is to transport vehicles on a regional basis. They are designed to perform this function. In Mission Valley the freeways are not only a major component of the community's transportation system, but they are also a key physical feature. As such, a careful design treatment of the freeway corridors will contribute positively to the overall visual character of the community.

DESIGN GUIDELINES

- Freeways should be buffered from adjacent frontage roads by landscaping. Landscaping not only provides visual relief but also helps reduce the effect of some of the heat and noise generated by the freeway traffic.

- Landscaping along the north-south freeway corridors (SR-163, I-805, I-15) should be designed to enhance the hillsides that frame these freeways as they enter the valley. Such landscaping will help to define the freeways as view corridors and entrance/gateways into the community.

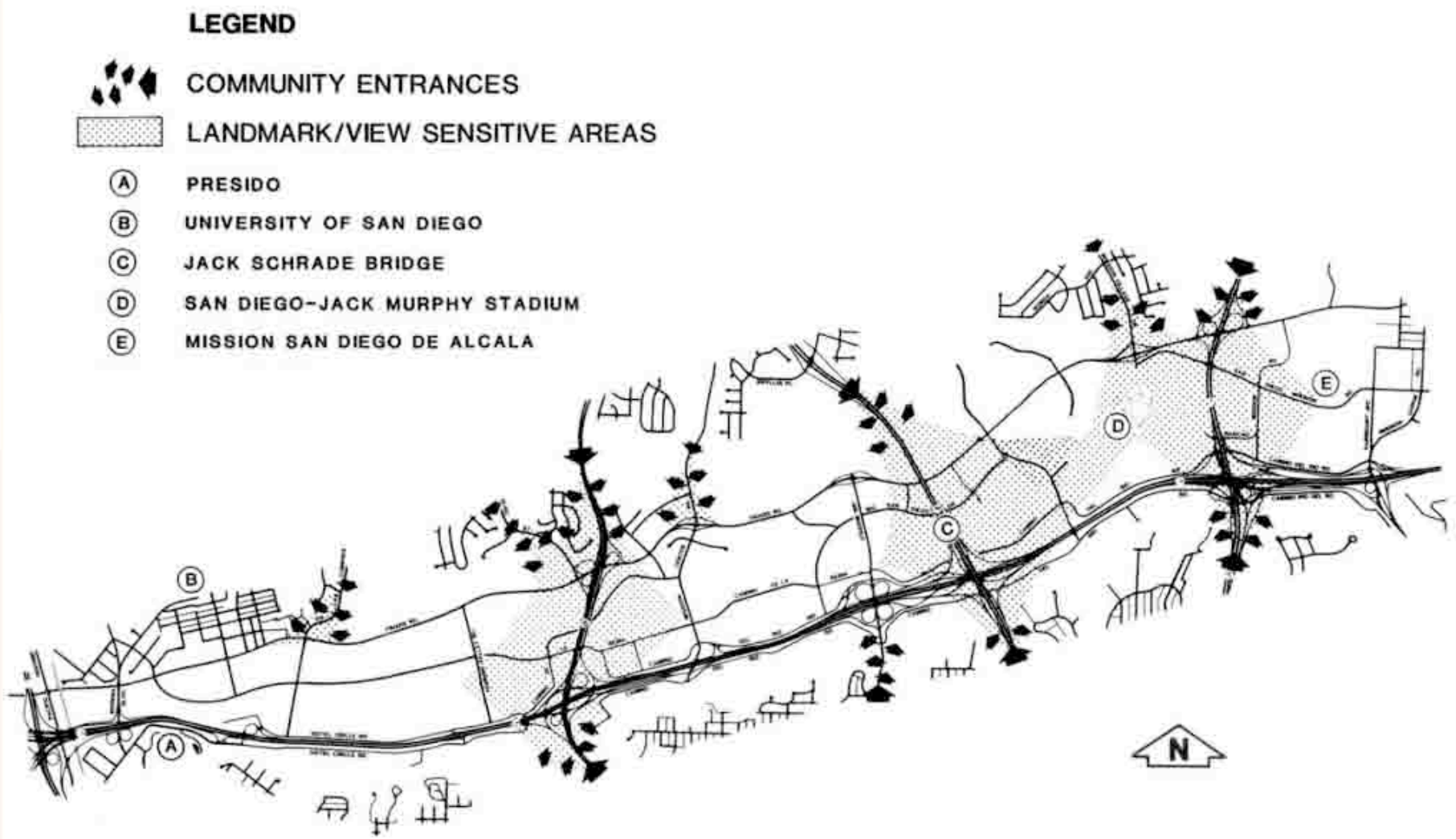
- The freeways themselves are massive structures. At several points in the valley, these structures are elevated, providing useable space underneath (163, I-805, I-15). These spaces maybe used for transit stops, or pedestrian areas, park space, and public art areas, provided noise levels are compatible with such activities. The freeway structures themselves provide sculptural forms that can be complemented with park like landscaping underneath.

- Interstate 8 is eligible for designation as a State Scenic Highway and future consideration should be given to designating it as a State Scenic Highway.

- Specific plans should incorporate comprehensive sign programs as part of their development guidelines.

- Signage for adjacent developments should be compatible and not attempt to “out shout” each other.

- Signage should be designed to complement the architectural design of buildings and developments.



Urban Design–Landmarks and Community Entrances

Mission Valley Community Plan

32 FIGURE

Major Roads

The function of major roads is to transport vehicles throughout the community. In Mission Valley, they connect the distant sections of the community and the various uses. Large-scale developments take access directly from these major roads. The major roads provide an important urban design element connecting individual projects. This aspect requires careful design consideration

DESIGN GUIDELINES

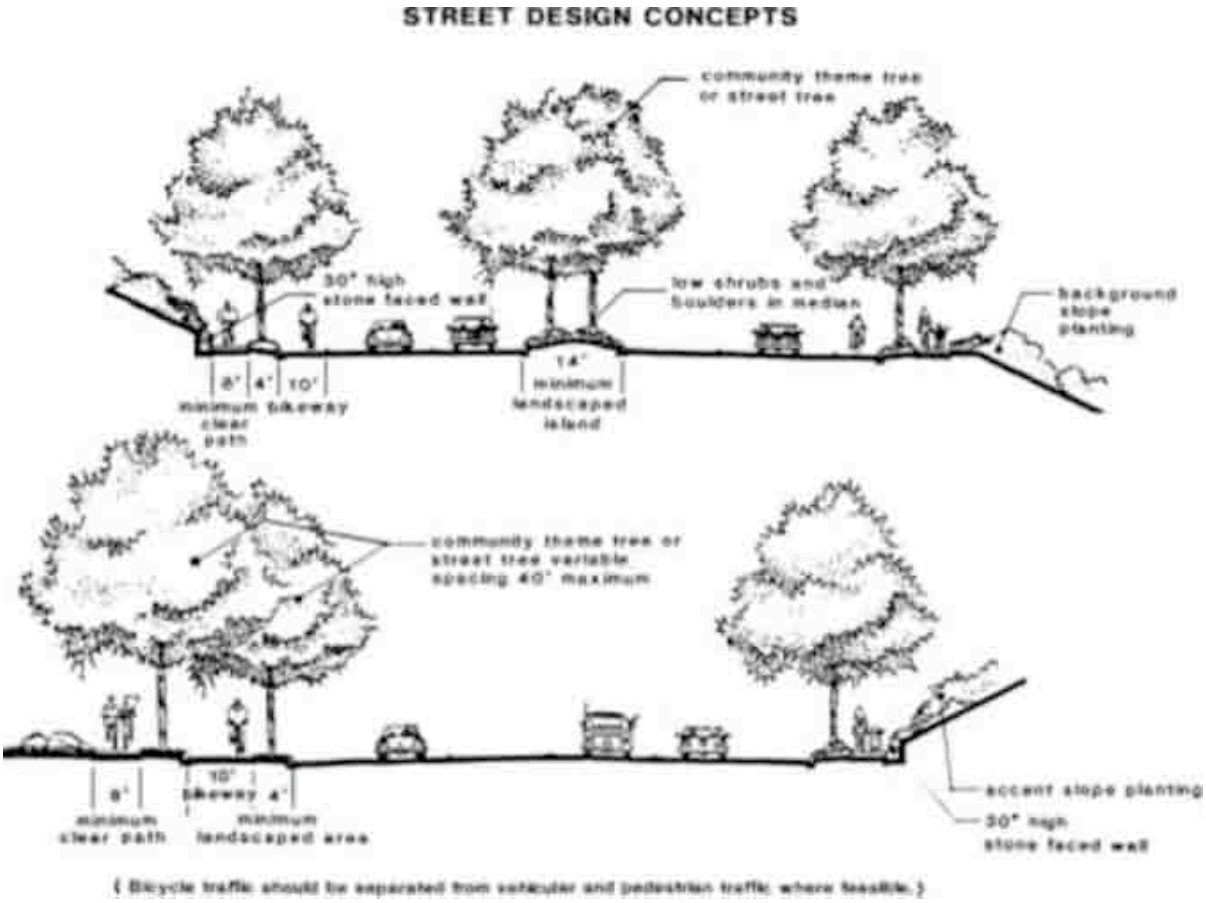
- Street trees should be provided along major streets. Trees should be long-lived (60 years) deep-rooted, evergreen, require little maintenance and be structurally strong, insect and disease resistant and require little pruning (see **Appendix F**).
- Street trees should be planted in the sidewalk between the parking or traffic lane and the pedestrian walk area, to provide greater pedestrian safety, and better delineate pedestrian spaces along the street.
- To allow visibility at pedestrian levels, landscaping materials should include tall trees with canopy areas, rather than short bushy trees.
- In the interest of maintaining sight distances and public safety, trees shall be planted no closer than 25 feet from the beginning of curb returns at intersections; ten feet from street lights; ten feet from fire hydrants; and, ten feet from driveways.
- Pedestrian sidewalks along major streets should have at least an eight-foot clear corridor. In areas of high intensity commercial development this clear sidewalk should be increased to a minimum of ten feet.
- Landscaped medians are highly desirable along major east-west streets, and their development should be encouraged. The landscaped material should be primarily tall-canopied trees and low maintenance ground cover.
- Major and collector street design should include space and design for transit stops (bus, LRT, taxis).
- Collector streets should receive the same design considerations as major streets.

Local Streets

The function of a local street is to carry vehicles for short trips at relatively slow speeds and to facilitate the movement of pedestrians. These streets are relatively narrow, and provide access to residential developments and small commercial centers.

DESIGN GUIDELINES

- Pedestrian sidewalks along local streets should have at least a six-foot clear path corridor. In areas of higher intensity residential development (exceeding 30 dwelling units/acre) the pedestrian clear path should be at least eight feet wide.
- On local streets near the San Diego River open space area, street trees should be compatible with the native vegetation along the river corridor (see **Appendix G**).



- To allow visibility at pedestrian levels, landscaping materials should include tall trees with canopy areas, rather than short and bushy trees.

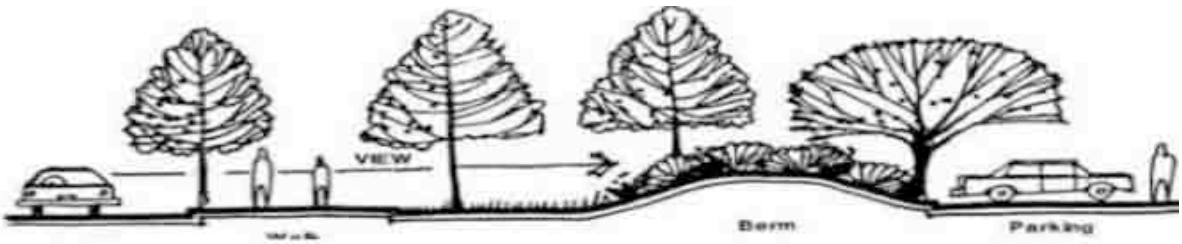
- Street tree species on local streets should vary from project to project, to allow some identification with each project and neighborhood. Flowering trees are desirable since they help provide greater identity (see **Appendix F**).

- Local street design should also include such features as benches, public telephones and drinking fountains.

- Commercial development located along local streets should orient toward the street. Commercial uses should occupy the ground floor areas fronting on the street. Street frontage ground floor commercial uses are particularly important.

Parking Areas

Parking areas are typically closely related to the street system. They provide the first impression and identification of a project, when a client, resident or employee first arrives. Therefore it is important that first impressions be pleasant and provide much needed identification. The following guidelines should be considered to assure high quality design in parking areas.



PARKING AREAS ADJACENT TO STREETS SHOULD BE SCREENED

BROAD HEADED TREES SHOULD BE UTILIZED IN PARKING AREAS.

PARKING STRUCTURES SHOULD BE SCREENED FROM STREET VIEWS WHERE POSSIBLE. PLANT MATERIAL COULD ALSO BE USED TO CREATE INTEREST.

DESIGN GUIDELINES

- Trees and other plants should be dominant elements of major entries into projects, particularly those entries into parking areas.

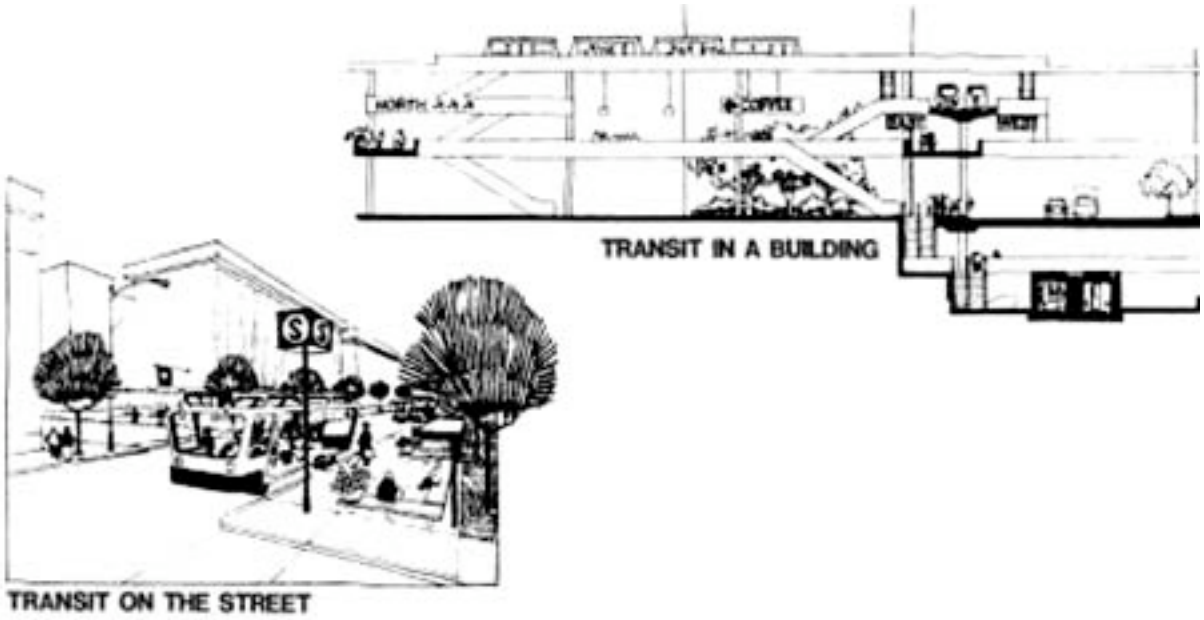
- Round headed, rather than upright trees should be utilized in parking areas.

- Parking lot trees should have a mature height and spread of at least 30 feet. They should also be long-lived (60 years), clean, require little maintenance, and be structurally strong, insect and disease-resistant, and require little pruning.

- A minimum ten percent of the parking lot area should be landscaped. Landscaping areas should be distributed between the periphery and interior landscaping islands and be designed to break up large paved areas. Landscaping islands should be a minimum ten feet wide.

- Parking lot landscaping should include primarily ground cover and tall-canopied trees, instead of bushes or short bushy trees,

- To screen parking lots and structures from the street, large dense shrubs may be massed at the edge of the parking area. Trees and shrubs can be combined with earth berms to screen adjacent parking areas.



- Turf areas should be minimized except where recreation areas are required. Turf for strict visual reasons (except at major entries) should be minimized because of the high water use and maintenance costs.

- Instead of extensive parking lot landscaping, development proposals may want to utilize the option of using patterned paving. If a parking lot is designed with patterned paving, interior-landscaping requirements may be reduced, based on the requirements of individual projects.

Light Rail Transit

The proposed LRT system will function as an important link in the regional transit system. At the same time, it will be critical to coordinate its alignment, design, and linkage with other Mission Valley transit facilities and future development patterns, if the system is to meet subregional or community-wide needs within the valley.

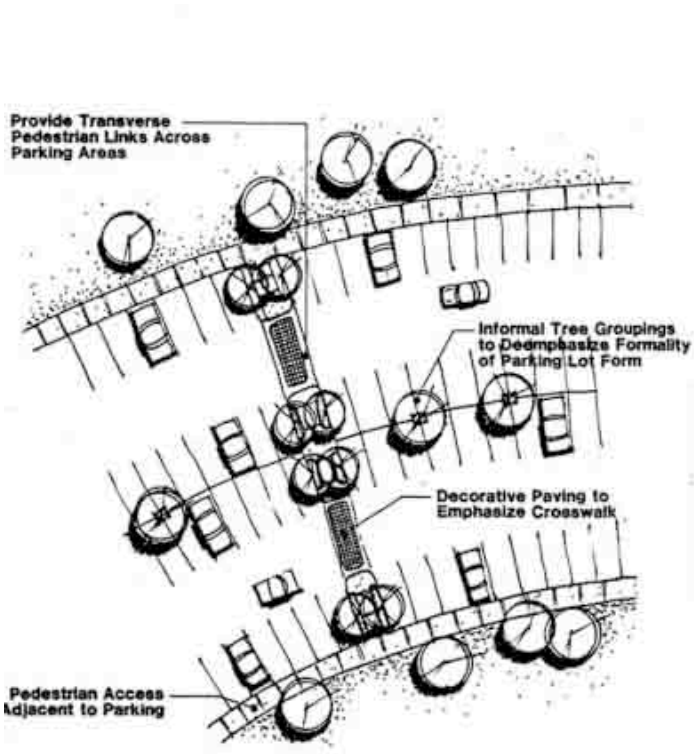
DESIGN GUIDELINES

- LRT stops should be located to maximize access from more intensely developed areas, and to optimize connections with other transit services. Transit stops should be pedestrian oriented. In order to provide the design orientation, transit stops should include shelters,

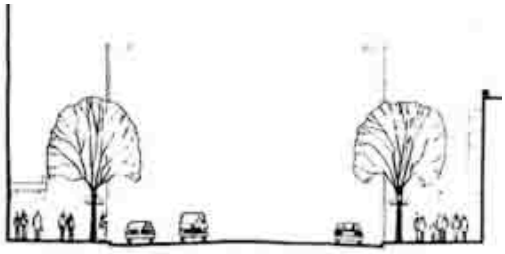
canopies, and patterned sidewalks, information kiosks, benches, and other pedestrian-oriented amenities. LRT stops located within building developments are highly desirable. Development proposals should consider such location in terms of their public spaces, access, zoning and adjacent land uses.

- Instances of LRT encroachment into the wetland buffer areas should be minimized. Where, because of previous development, it is necessary to have such an encroachment, and the landscaped buffer area is reduced, an increased landscaped buffer should be provided in other areas along the corridor as compensation.

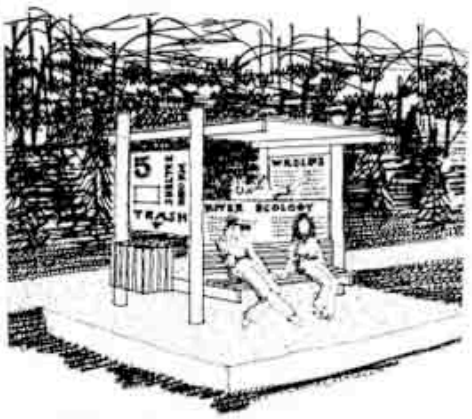
- Where previous development requires that the LRT encroach into the wetlands, wetland replacement or enhancement will be required consistent with the conceptual requirements of the environmental agencies in charge, and the **Wetlands Management Plan Element** of this Plan.



PEDESTRIAN AREAS IN PARKING LOTS.



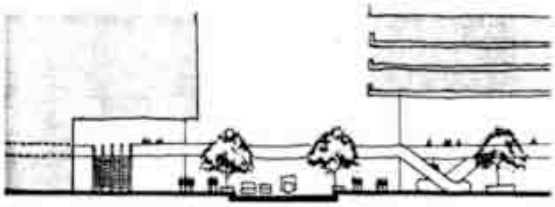
PEDESTRIAN AREAS ON RETAIL STREETS.



PEDESTRIAN AREAS ALONG THE RIVER.

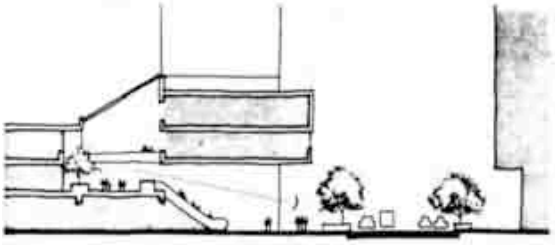
Pedestrian Areas

Pedestrian areas are an important and previously ignored aspect of design in Mission Valley. The only significant existing pedestrian areas are enclosed within the two major shopping centers. Everywhere else, the pedestrian is discouraged. The various developments are connected only by roads without sidewalks or anything of interest to the pedestrian. Pedestrian areas can be a route from one destination to another or a destination in itself.

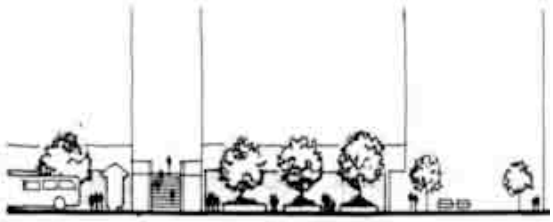


PEDWAY PERPENDICULAR TO A MAJOR RETAIL STREET

SKYWAYS CAN ALSO BE BUILT BETWEEN BUILDINGS



PEDWAY PARALLEL TO A MAJOR RETAIL STREET



AT-GRADE PEDESTRIAN STREET

However, pedestrian areas provide expanded opportunities for local access and circulation needs within the community. The function of pedestrian areas or walkways is to provide a safe route for foot travel and access to gathering places and recreational facilities. Typical areas of design concern for pedestrian activities are sidewalks, open space walkways, malls, recreational centers, plazas, bridges, overpasses and skyways.

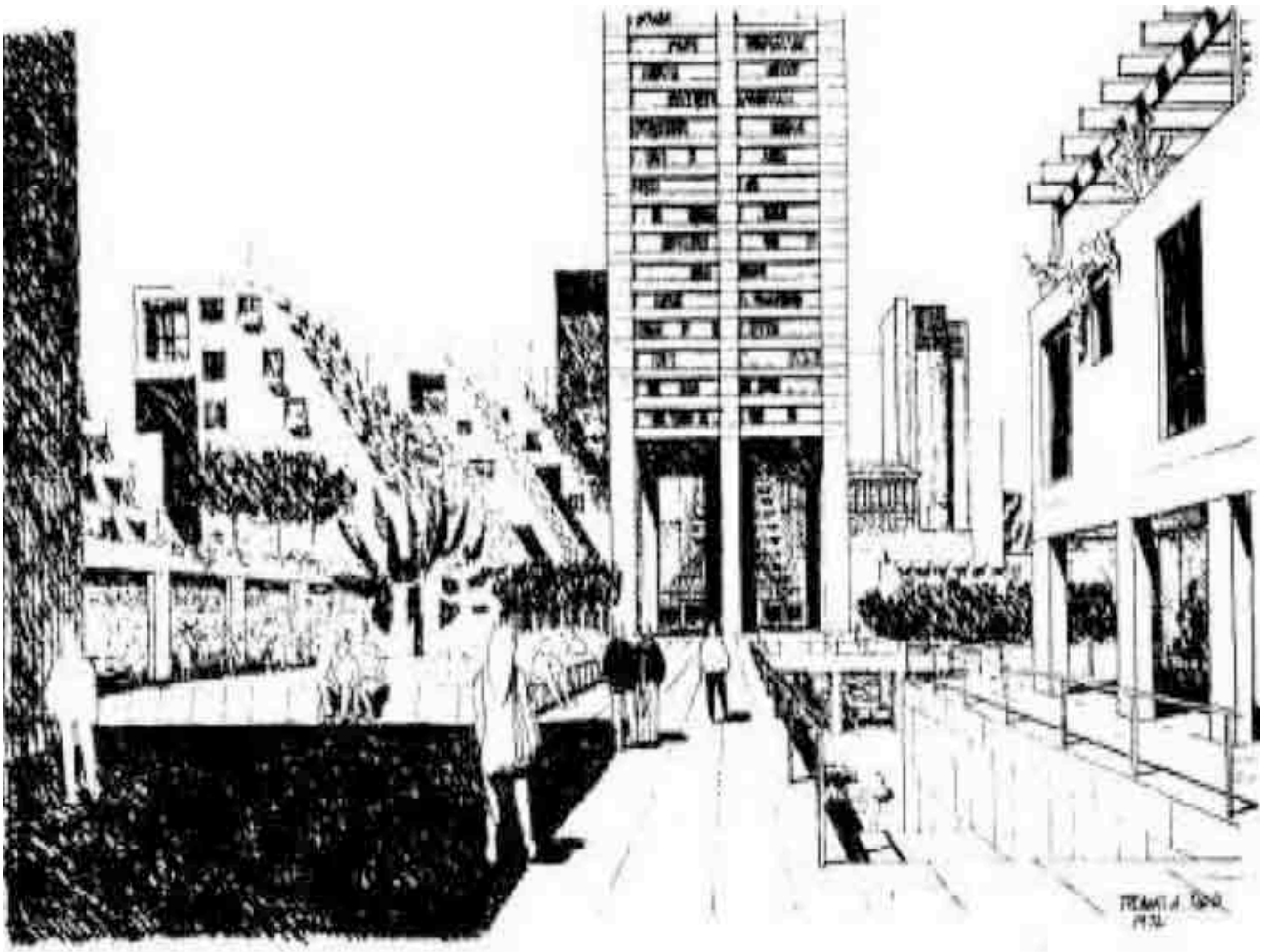
DESIGN GUIDELINES

- Pedestrian areas should include safe routes between developments, preferably separated from vehicular traffic. They should provide interest to the walker so as to promote their use. Interest can be created by paving materials, undulating slopes, landscaping, retail uses, public events (concerts, sidewalk sales, other gatherings, etc.), selling of food (cafes or vendors), and public art such as urban sculpture. Pedestrian areas should also include sitting areas and adequate lighting. Along the river corridor, pedestrian areas might also include observation areas and walks with exhibits featuring wetland habitat descriptions.

- All pedestrian walks should have a minimum width of six feet in order to encourage pedestrian use. In areas of higher development intensity, widths of ten feet to 20 feet should be considered. Pedestrian sidewalk width guidelines are incorporated in the street design section of this section.

- Pedestrian crossings of streets or parking lots should be identified through special paving and design materials. This technique should be used to provide access pedestrian areas across low volume and low speed streets.
- Pedestrian bridges should be provided to connect high activity areas across high speed, high volume streets. Their location should be designed to provide the most direct pedestrian access possible. Bridge access should not be hidden from view of pedestrian centers of activity.
- Pedestrian bridge design should incorporate handicapped access. The span and structure should also be treated simply and sculpturally, since it provides a gateway effect to the street, or the space below.
- Pedestrian tunnels may be developed under special conditions as alternatives to bridges. Where this is the case, the tunnel should be well illuminated, and include commercial and other people gathering activities to provide better personal security.
- Pedestrian areas should incorporate patterned paving to give them more visual prominence, human scale, and beauty.
- Pedestrian connections between buildings at elevations higher than the second or third floors of buildings may be highly desirable to provide greater building activity resulting from the connections and the greater land use mixtures. These connectors are known as skyways and they provide a pedestrian network that provides safe and efficient means of foot travel within high-intensity areas and urban areas. Skyways are typically enclosed, although they can also be open.
- Skyways should not angle up or down from one building to another when internal floor-level adjustments can be made.

  Skyways should provide transparent areas, glass, or be non-enclosed for security and for pedestrian orientation.
- Skyway and pedestrian bridge widths should allow for adequate passage of pedestrians at peak travel hours. A common width now in use is 12 to 15 feet minimum.
- Continuous indirect lighting should be incorporated into skyways and bridges as well as interior building pathways to supplement natural light sources and to increase security.
- Skyway and bridge building materials should be selected for ease of maintenance and replacement.
- Skyway and bridge directional signage is an important, aspect of skyway and bridge design. There should be directional signage coordination for skyways and bridges throughout the valley.
- Private project recreational and/or urban plazas should be linked visually and/or physically to the open space corridor, in order to integrate them into the area wide-open space system.



APPROPRIATE BUILDING BULK AND ORIENTATION CREATES BETTER SUN EXPOSURE FOR PEDESTRIAN ACTIVITY AREAS, IN A MIXED USE PROJECT.

ENERGY AND CONSERVATION CONSIDERATIONS

The need for proper energy planning and conservation has become readily apparent in recent years. Shortages in traditional energy sources, as well as loss of non-renewable sources, coupled with spiraling prices make it important that steps be taken to control and conserve the amount of energy expended on both local and national levels. Energy planning and conservation issues are expected to become even more important in the future. Therefore, it is important that issues relative to these subjects be identified.

The design guidelines address building circulation, fenestration, color, treatment of roofs, building location relative to public plaza spaces, application to mechanical equipment, multiple use opportunities for the designs of mechanical equipment, and desirable landscaping types.

Solar Access

DESIGN GUIDELINES:

- Building location and height should be carefully considered in relation to public spaces. Plazas and other public spaces should not be totally kept in shadows, and should be protected from excessive wind conditions.

- Buildings should orient the majority of their glass areas to the south, and deciduous trees should be located on that southern facade. This allows sun to warn the building in winter, when it is highly desirable, while providing shade in the warmer summer months.

- Building facades should incorporate overhangs to shade direct sun and reduce heat gain.

- Roof surfaces should be constructed of highly reflective material to reduce solar roof loads, unless a passive heat system is employed.

- Sloped roof surfaces ideally should be located facing the south, and at an angle that can accommodate later retrofitting for solar energy.

- Building colors should be carefully considered in order to minimize heat transfer into building structures.

- Building facades should incorporate overhangs or canopies to shade direct sun and reduce heat gain.

- In commercial buildings, nearly 50 percent of the energy is used for lighting purposes. Approximately 33 percent of the total building energy is consumed by environmental comfort systems. Natural daylight should be used as a conservation technique.

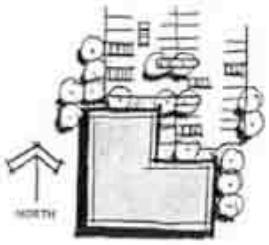
- Buildings should not solely depend on mechanical systems for ventilation. Building design should encourage natural ventilation.

- To reduce solar reflection on buildings, parking areas with large paved surfaces should be located to the east and north of adjacent buildings.

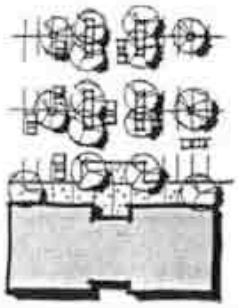
- Evergreen trees should be placed on the west side of buildings to provide protection from prevailing winds.

- The installation of active solar hot water and solar heating systems should be considered for buildings. Rooftop solar energy collectors should be designed as an integral part of the building form. The roof slopes necessary for the energy collector are important and possible determinants of architectural shapes. If rooftop solar energy collectors are to be utilized by a building complex subsequent to original building construction, an appropriate add-on design that integrates the collectors into the building form should be required.

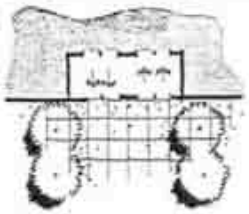
SOLAR DESIGN CONCEPTS



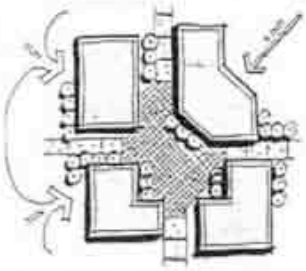
LARGE PARKING AREAS SHOULD BE LOCATED EAST & NORTH OF ADJACENT STRUCTURES TO REDUCE SOLAR REFLECTION.



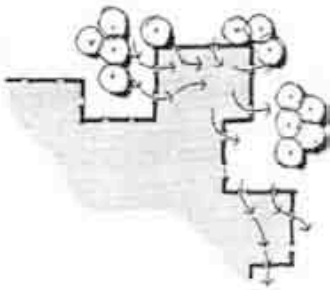
INCORPORATE DECIDUOUS TREES INTO PLANTING PLANS NEAR BUILDINGS & LARGE PAVED AREAS.



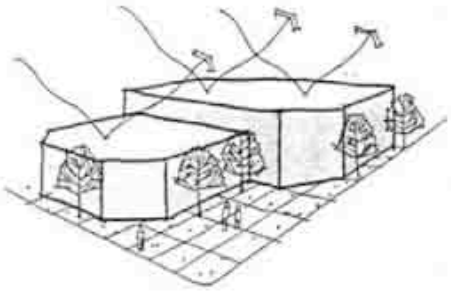
IER UTILIZING VESTIBULES AT ENTRYWAYS TO REDUCE HEAT OR COLD INFILTRATION.



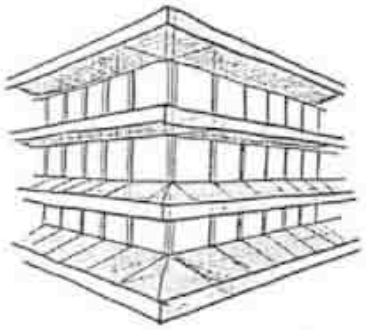
WHERE PLAZAS ARE UTILIZED, BUILDINGS OF APPROPRIATE HEIGHT SHOULD BE CLUSTERED TO PROVIDE PROTECTION FROM SUN AND WIND.



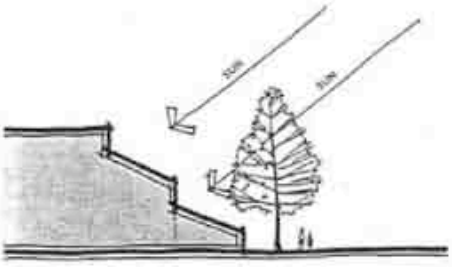
BUILDINGS SHOULD BE DESIGNED TO ENCOURAGE NATURAL VENTILATION.



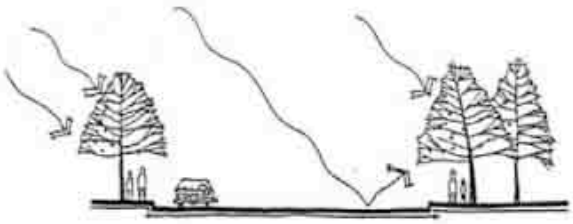
ROOF SURFACES SHOULD BE CONSTRUCTED OF HIGHLY REFLECTIVE MATERIAL TO REDUCE SOLAR ROOF LOADS, UNLESS A PASSIVE HEAT SYSTEM IS EMPLOYED.



BUILDING FACADES SHOULD INCORPORATE OVERHANGS TO SHADE DIRECT SUN & REDUCE HEAT GAIN.



ORIENT THE MAJORITY OF GLASS AREAS ON BUILDINGS TO THE SOUTH & LOCATE DECIDUOUS TREES ADJACENT.



MINIMIZE STREET & PARKING SURFACES FOR SOLAR REFLECTION & HEAT RADIATION CONTROL.

Water Conservation

DESIGN GUIDELINES

- Buildings should be designed with mechanisms that will reduce water consumption. The following water saving devices should be considered: Low flow plumbing fixtures; cycle adjustment machines; pressure regulators to maintain water pressure to desirable conservation levels; hot water pipe insulation; and, automatic sprinkler systems.

- Water should be conserved by using low maintenance drought tolerant plant material, and the use of inert landscape materials (rocks, gravel, ornamental paving) and sculptured forms.

- Drip irrigation systems should be encouraged.

- Reclaimed water use should be encouraged, particularly for large master planned projects.

- Mechanical equipment in buildings should either be buffered and hidden from view, or should be sculptural. For example; cooling towers, when necessary, could be designed as fountains.

- **Appendix D** provides specific recommendations for water conservation.

NOISE CONSIDERATIONS

Because of the Valley's elongated shape, its intensive freeway system and projects may be subjected to noise levels in excess of City standards. Design guidelines are necessary to guide development to meet the noise standards desirable for development in the Valley.

DESIGN GUIDELINES

- Landscaped earthen berms should be constructed to reduce noise effects. Earthen berms of the same height as a wall are as effective in reducing noise, but have greater design appeal and appearance when fully landscaped. Other effective methods are building setbacks, or elevation differences.

- Non-sensitive land uses, such as garages, parking lots, or recreational areas should be sited adjacent to major noise producing roadways and freeways.

STREET GRAPHICS

Mission Valley is a developing urban community and this **Urban Design Element** is intended to provide a full range of development guidelines which are intended to result in an aesthetically pleasing community. One important aspect of urban design that is often ignored is that of street graphics.

Street graphics is a rather broad term which, for the purposes of this document, is intended to encompass both public and private signing and to establish a basis upon which a comprehensive signage program can be developed for Mission Valley.

DESIGN GUIDELINES

- A special sign district should be developed for Mission Valley.
- Signs should perform the function of providing directions and information to both the motorist and the pedestrian.
- A unique public signage design program should be developed. This would include street identification signs and directional signs.
- High-rise buildings should be identified by symbols and graphic designs rather than by full building width lettering.
- Signage should be designed to complement the architectural design of buildings and developments.

- Specific plans should incorporate comprehensive sign programs as part of their development guidelines.
- Signage for adjacent developments should be compatible and not attempt to "out shout" each other.

WATER RECLAMATION PLANT

The following design guidelines should be applied to the Mission Valley Water Reclamation Plant.

- Buildings should be designed to present an attractive facade, blend in with the surrounding commercial area and not appear extravagant or too different.
- The use of reflective glass should be minimized.
- Machinery, ventilating facilities and other equipment should be screened as much as possible.
- Site layout and roof treatments should be sensitively designed to present a positive view from above.

- Screening, in the form of fences or walls, should be used to screen plant facilities from adjacent areas. Chain-link fencing should not be used.

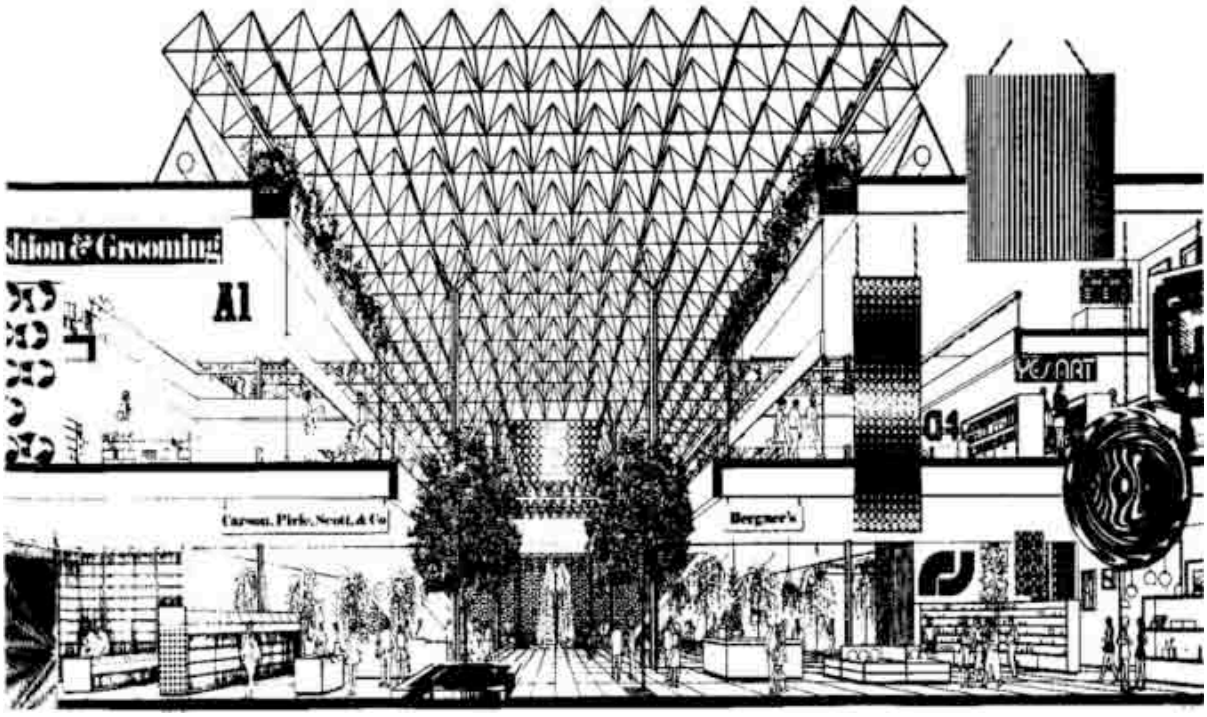
- Extensive landscaping should be provided on-site. Landscaping requirements of the Mission Valley Community Plan, the Mission Valley Planned District Ordinance and the citywide Landscape Technical Manual should be used in designing a landscape plan for the site.

- Along Camino del Rio North, provide an eight-foot parkway with a ten-foot non-contiguous sidewalk. Street trees in conformance with the Plan should provided in the parkway.

- Odors emanating from the site should be minimized.

- Lighting should be directed on-site. No lighting should be cast in the direction of the San Diego River.

- Realignment of Camino del Rio North should stay out of the 100-year FW boundary.



Signage should be designed to complement the architectural design of buildings.