4.0 DESIGN GUIDELINES

4.1 PURPOSE

The purpose of the master plan design guidelines is to provide written and graphic information to support the Master Plan Vision, Principles and Recommendations and to support the following Development Regulations in the City of San Diego Municipal Code:

- Mission Valley Planned District Ordinance (Chapter 15, Article 14, Division 1-4),
- Community Plan Implementation Overlay Zone (Chapter 13, Article 2, Division 14, Navajo)
- Mission Trails Design District (Chapter 13, Article 2, Division 12)

All City of San Diego public projects that have approved Master Permits, prior to the adoption of this Master Plan, to do work in the River Valley are exempt from the requirements of the San Diego River Park Master Plan Design Guidelines but are encouraged to comply where possible.

4.2 RELATIONSHIP TO MSCP AND ENVIRONMENTALLY SENSITIVE LANDS REGULATIONS

In addition, to supporting the Master Plan's Vision/Principles/Recommendations and the Development Regulations, the design guidelines must also work with the requirements of the Multiple Species Conservation Program (MSCP) and the Environmentally Sensitive Lands (ESL) Regulations for Wetland Buffers (Chapter 14, Article 3, and Division 1).

The San Diego River and a majority of the area adjacent to the river are mapped as Multi-Habitat Planning Area (MHPA) and subject to Section 1.4 of the MSCP Subarea Plan 'Land Use Considerations'. These Land Use Considerations are implemented through the ESL regulations, the City's Biology Guidelines and the MSCP Subarea Plan during project review and approval.

The land adjacent to the river contains wetlands that are subject to the Environmentally Sensitive Lands Regulation for Wetland Buffers. These regulations require a wetland buffer to be maintained around all wetlands as appropriate to protect the functions and values of the existing wetland area. In the Coastal Overlay Zone the wetland buffer is a standard 100-feet minimum. Outside the Coastal Overlay Zone, the buffer is determined by site specific evaluation of onsite wetland's functions and values. A reduction of the 100 foot wetland buffer standard may require consultation with the wildlife agencies (U.S. Fish & Wildlife Service and California Department of Fish and Game) before any public hearing for a development proposal. The wetland buffer can be the same footprint as the MHPA or in some cases the buffer will be larger than the MHPA boundary due to the functions and values of the existing wetland. Therefore, all development proposals in and adjacent to the San Diego River must map the following three boundaries:

1. The River Corridor and River Influence Areas of the San Diego River Park Master Plan (this boundary can be determined by applying the master plan guidelines).
2. The MHPA boundary (this boundary has been mapped and can be accessed from SanGIS mapping systems.
3. The Wetland Buffer (this boundary will be determined based on the biological resource present at the time of project submittal).

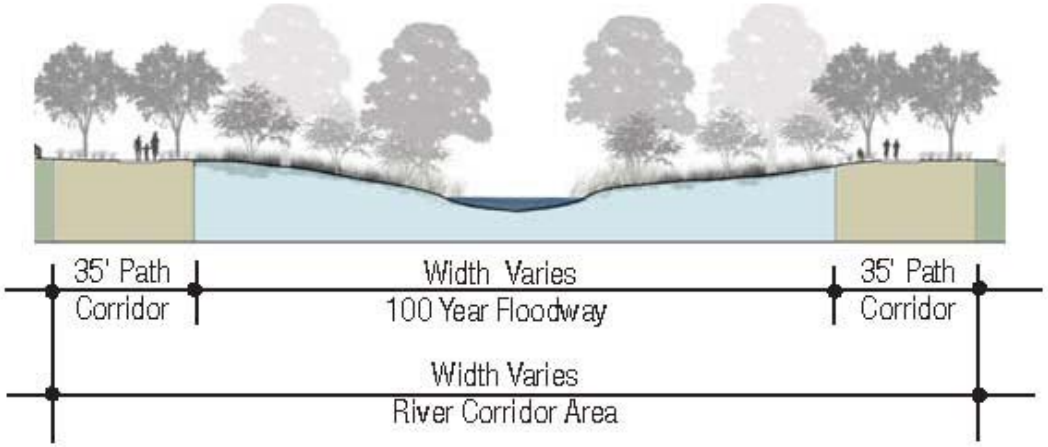
Once the boundaries are mapped, the largest mapped boundary will prevail. In some areas where the MHPA and the Wetland Buffer are larger than the San Diego River Corridor Area, then the San Diego River Park Pathway (river pathway) will be required to be outside the MHPA and the wetland buffer. All development within the San Diego River Park is required to undergo a discretionary review process and obtain the required discretionary permits.

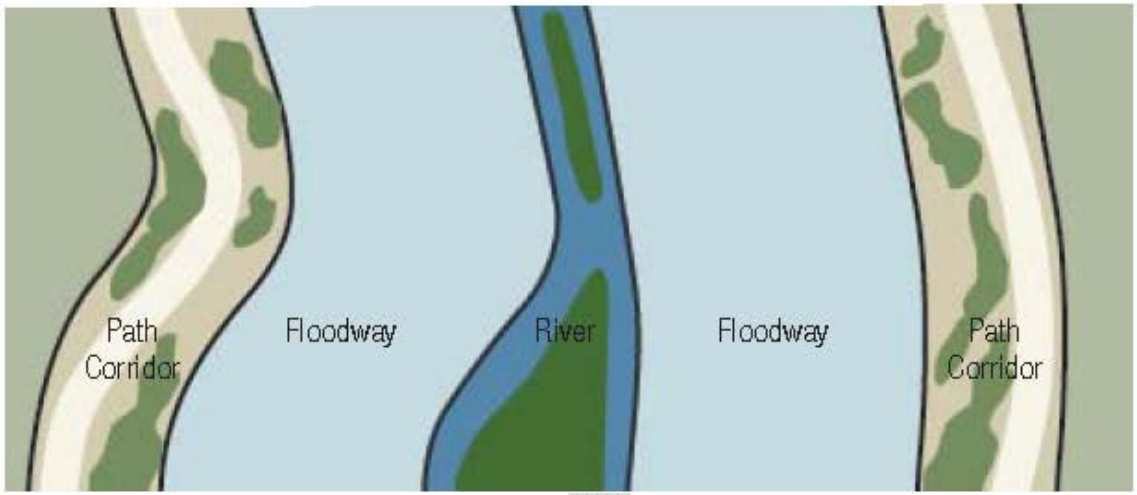
4.3 RIVER CORRIDOR AREA

4.3.1 PURPOSE AND DEFINITIONS

4.3.1.1 Purpose

The purpose of the River Corridor Area is to restore the health of the San Diego River by cleaning the river and its hydrologic function through increasing its length and recharge area, separating it from ponds, and creating opportunities for braiding and meandering. It will also enhance wildlife habitat by providing a continuous movement corridor that varies in width and provides diversity of habitat and native vegetation. The River Corridor Area will also serve as a natural open space and passive recreation system for the surrounding communities by providing a river pathway and trail network and other park amenities. Its purpose is also to reclaim the valley as a common gathering place for all San Diego citizens, unify fragmented land of the river valley, emphasize a continuum of experience from the ocean to the mountains, and reveal the history of the river valley and its significance to the San Diego Region.





River Corridor Area Plan and Section

4.3.1.2 Definitions and Boundaries

The River Corridor Area is defined as the 100-year Floodway and the Path Corridor:

- 100-year Floodway Boundary: Is defined by the Federal Emergency Management Agency (FEMA) mapped area for the 100-year Floodway and this area will vary in width depending on the location along the river. This area also provides for; a filtration zone adjacent to the river; an opportunity for the river to meander in; places for wildlife habitat and, where possible, pedestrian trails.

- Path Corridor: The Path Corridor is 35 feet beyond the 100-year Floodway on each side of the river. The intent of this sub-corridor is to provide a zone for wildlife habitat, native vegetation, a multi-use river pathway, and passive recreation.

4.3.2 SITE PLANNING FOR THE RIVER CORRIDOR AREA

4.3.2.1 100-Year Floodway

A. Development in the floodway shall be in accordance with Municipal Code Section143.0145 (Development Regulations for Special Flood Hazard Areas) and the city's Multiple Species Conservation Program (MSCP) Subarea Plan Land Use Considerations where the floodway is mapped MHPA.
B. The River bottom and sides shall be natural or designed with natural materials and sized to accommodate a 100 year flood as well as provide for groundwater recharge capability.
C. The use of gabions and native stone on river sides to dissipate flows shall include design features to provide for or preserve wildlife habitats and wildlife movement corridors.
D. Where floodway width permits, the bottom of the floodway should be a maximum of 5% cross slope to encourage river braiding and meander.

Rehabilitated Platte River in Colorado designed to be natural in appearance by utilizing native materials and gentle slopes

Example of natural stone used to dissipate flows and allow for wildlife movement

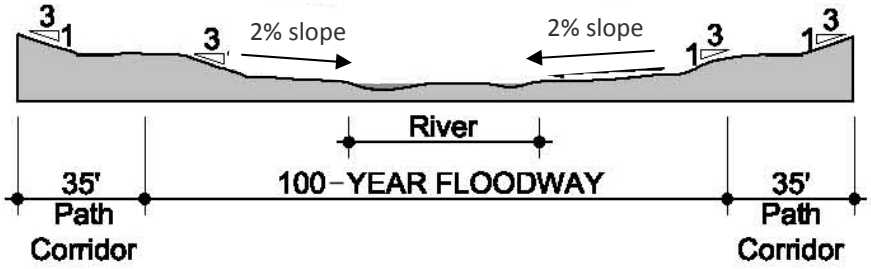
Natural river bank in Southern California with gently sloping edges and native plant materials

Concrete or other man made materials should not be used to stabilize channel banks

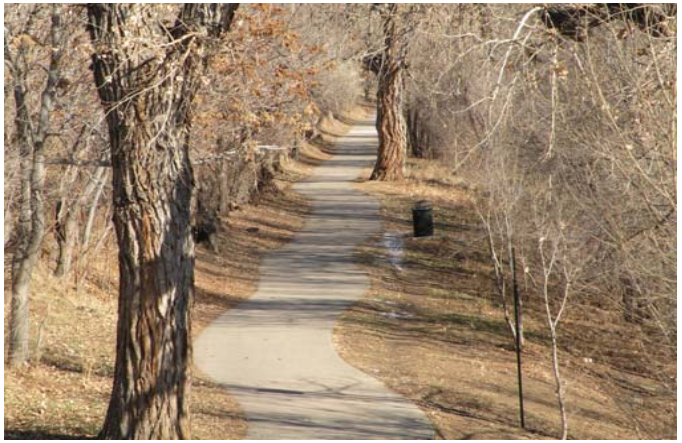
4.3.2.2 Path Corridor

A. Manufactured slopes within the Path Corridor should not exceed 3:1 gradient and should vary to allow transition to adjacent slopes. Avoid long, continuous manufactured slopes with hard edges and provide smooth transitions. All slopes are to be appropriately stabilized and re-vegetated with native plants found in the immediate vicinity.
B. When rip-rap is required, it should be native stone or similar in color to native stone.
C. All drain pipes in this area shall be not visible from the river pathway.
D. Headwalls should be as small as possible and match existing soil color.

Example of manufactured slope and native planting between path and river at approximately 3:1 slope



River Corridor Area Section



Example of a smooth transition at top of slope

4.3.2.3 Storm Water Drainage and Water Quality Design

Development within the River Corridor Area should implement the requirements of the City's Storm Water Standards Manual and the San Diego River Watershed Management Plan. In addition, all projects should include innovative approaches to storm water drainage and water quality management that incorporates the design principles of sustainable development. These design principles include:

A. Source control best management practices that are designed to reduce the initial contribution of pollutants into a water way, such as implementing educational programs on source control, maintenance practices on source control, and/or integrated pest control management.
B. A site design best management practice that incorporates permeable surfaces, low water use landscaping, and open spaces which facilitate the reduction of runoff and pollutants.
C. Treatment control best management practices that maximize pollutant removal from runoff flows in creative systems which provide multiple functions, such as incorporating landscaping filters (bioswales and detention basins) to reduce flow velocities, to filtering runoff to control erosive processes.

4.3.2.4 River Pathway

The river pathway, a multi-use pathway for bicycle and pedestrian use, shall be located within the 35 foot Path Corridor and it is considered the primary pathway for the entire 17.5 mile River Park from the Pacific Ocean in the Ocean Beach Community to the City of Santee. Where possible, the river pathway should occur on both sides of the river. In cases where site conditions or topography does not allow for the river pathway, a narrower pedestrian trail should be provided. If any part of the River Corridor Area is mapped MHPA or determined to be a wetland buffer area, the river pathway shall be moved just outside of these two areas. In these situations, the outer edge of the river pathway will now become the new boundary for the River Corridor. The river pathway will connect to the existing Mission Trails Regional Park (MTRP) trail system on the west and east boundaries of the park. All trails within MTRP are subject to the MTRP Master Plan requirements.

A. The river pathway shall be 14 foot wide and shall consist of a 10 foot wide concrete, porous concrete material preferred, with a 2 foot wide shoulder area of decomposed granite or similar soft material along each side of the 10' wide river pathway. A 12 foot vertical clearance shall be provided over the 14 foot wide river pathway.

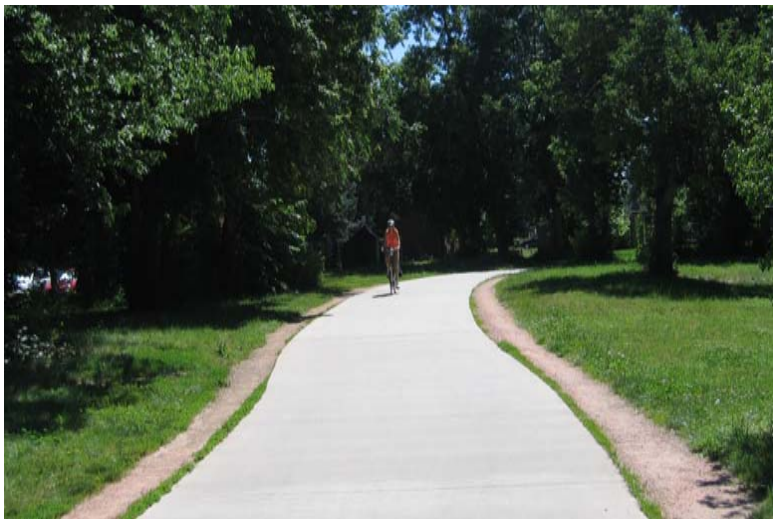
B. The porous concrete material should be a natural earth brown or tan color and with a texture appropriate for bicycle and pedestrian uses.

C. The river pathway shall meander, where possible, within the 35 foot Path Corridor. A 10 foot wide minimum landscape area between the edge of the 100 year floodway and the edge of the river pathway shall be provided.

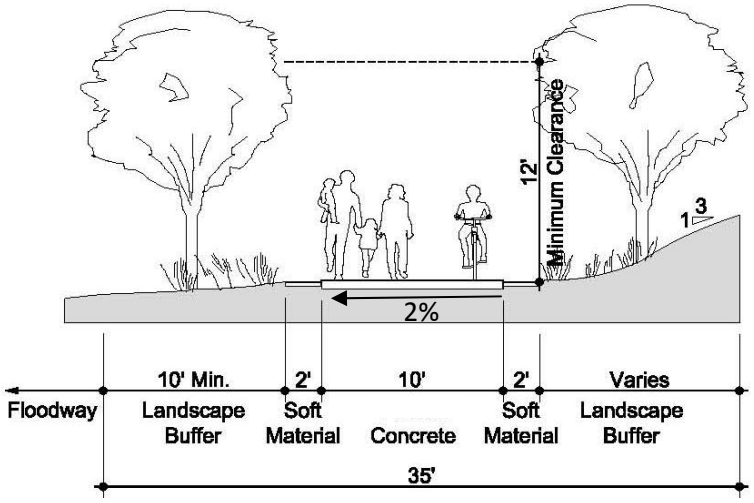
D. Creative elements such as leaf or animal imprints appropriate to each reach may be included in the river pathway paving material.

E. The river pathway shall meet ADA guidelines and California Title 24 regulations for accessibility.

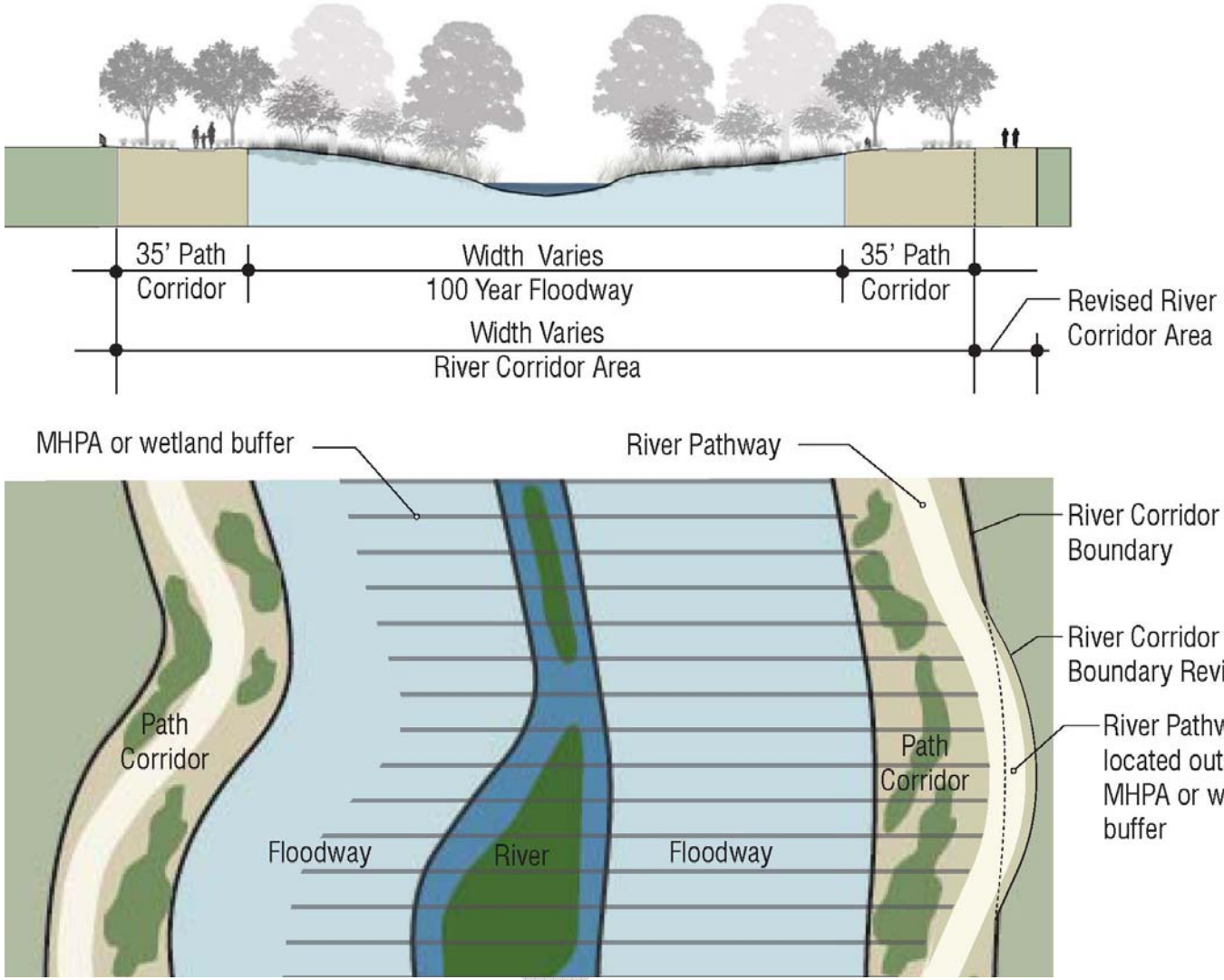
F. The river pathway surfaces should have a cross slope no greater than 2%.



Typical River Pathway with soft surface on both sides



River Pathway Section



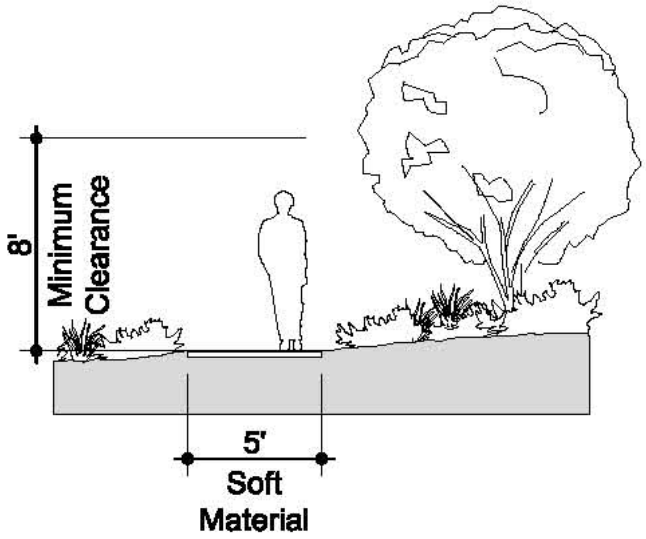
River Corridor Area Plan and Section at MHPA on Wetland Buffer Area

4.3.2.5 Pedestrian Trails

Trails proposed within the River Corridor Area provide a secondary path system for pedestrians to experience the river valley native landscape and habitat. In some areas, trails will provide a river pathway connection where physical constraints do not permit the river pathway to occur. Typically, trails should be confined to existing trail locations to provide the least amount of impact to the wildlife habitat.

A. Trails should be a maximum of 5 feet wide and have a minimum vertical clearance of 8 feet. Trails within the MHPA shall be 4 feet wide and meet the requirements of the MSCP Subarea Plan, Section 1.4 'Land Use Considerations'.
B. Trails should be a continuous loop, connecting to the river pathway. No dead-end trails should occur.
C. Trails should be soft-surface materials, such as decomposed granite (color to be a natural earth brown or tan color) or suitable native soil with a maximum cross slope of 2%.
D. Trails should have an alignment that responds to natural conditions with minimal grading and disturbance to existing vegetation.
E. Trails should meander, where possible.

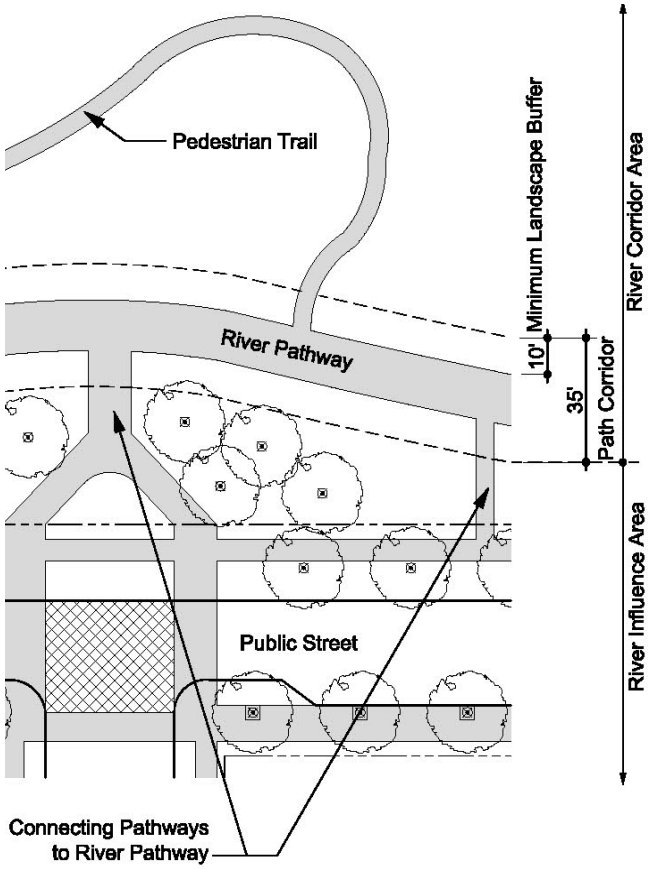
Example of a Pedestrian Trail



Pedestrian Trail Section

4.3.2.6 Connecting Pathways

The river pathway and trail system should connect to existing regional trails and public sidewalks on adjacent properties and/or parks. Connecting pathways and trails to the river pathway shall meet the design guidelines noted in section 4.3.2.4 and 4.3.2.5.



Connecting Pathways Diagram

Connecting Pathway

4.3.2.7 Bridges

All new or redeveloped pedestrian bridges should be specially designed to acknowledge and announce the crossing of the San Diego River. Signs should be included to highlight the pedestrian crossings, as well as the San Diego River Park.

A. Pedestrian/Bicycle-only bridges should be at locations of steep grade crossings, streambeds and in other areas where protection of the water quality and wildlife habitat is needed. The width of bridges should be determined by anticipated use, but should provide a minimum of 10 foot wide area for pedestrians and bicyclists.
B. Pedestrian/Bicycle-only bridges should be designed to blend into the natural landscape character of the River Corridor Area through the use of natural materials or material that reflects the natural colors of the river valley. Bridges that cross significant habitat or historic view sheds should include a platform to allow for pedestrian viewing without obstructing mobility.
C. Vehicular/pedestrian/bicyclist bridges should include a sidewalk for pedestrians and where possible a Class 1 bike route in each direction or, at a minimum, on one side of the bridge.
D. Bridges crossing the River Corridor Area should be designed, where possible, to accommodate the river pathway passing beneath the bridge during typically low water conditions (minimum of 12 feet vertical clearance) with a ramping connection to at-grade crossings to accommodate high water conditions.
E. Bridge spans shall provide adequate space for both the river and dry land area to accommodate wildlife movement.

Example of a Pedestrian / Bicycle Bridge

Example of a grade separated high and low water level street crossing

4.3.2.8 Boardwalks

Boardwalks provide a stable and creative approach to accessing shorelines and wetland features for Park users of all abilities. Boardwalks can be constructed in several different ways, depending upon the site conditions. The boardwalk structure is typically supported on piers which can be used in wet or even submerged areas. Boardwalks could be installed in lieu of surface paths within sensitive habitat areas; however, no boardwalk elements may be installed in which would impede or obstruct the 100 year floodway.

Example of pedestrian boardwalk within a sensitive habitat

4.3.2.9 Picnic Areas and Overlooks

Picnic areas, cultural and scenic overlooks should be provided along the river pathway within the 35 foot Path Corridor, at locations where habitat or historic views are available, where connections to adjacent communities are accessible, and at a minimum shall be provided at intervals not to exceed one-half mile. These places will function as destinations, rest areas, and places of education and orientation. Interpretive information should be integrated into overlooks and picnic areas.

Picnic areas and overlooks could include a combination of the following:

- Picnic tables on porous concrete material (preferred)
- Trash and recycling receptacles
- Bicycle racks
- Shade structure or shade trees
- Benches and/or seat walls
- Interpretive signs
- Drinking fountains
- Decks

Example of bench at elevated overlook

Example of picnic table at elevated overlook

4.3.3 ARCHITECTURE FOR THE RIVER CORRIDOR AREA

Permanent structures are not allowed in the 100-year Floodway in accordance with the City of San Diego Municipal Code, Chapter 14, Article 3, and Division 1. Within the 35 foot Path Corridor the following permanent structures should be located to provide the following:

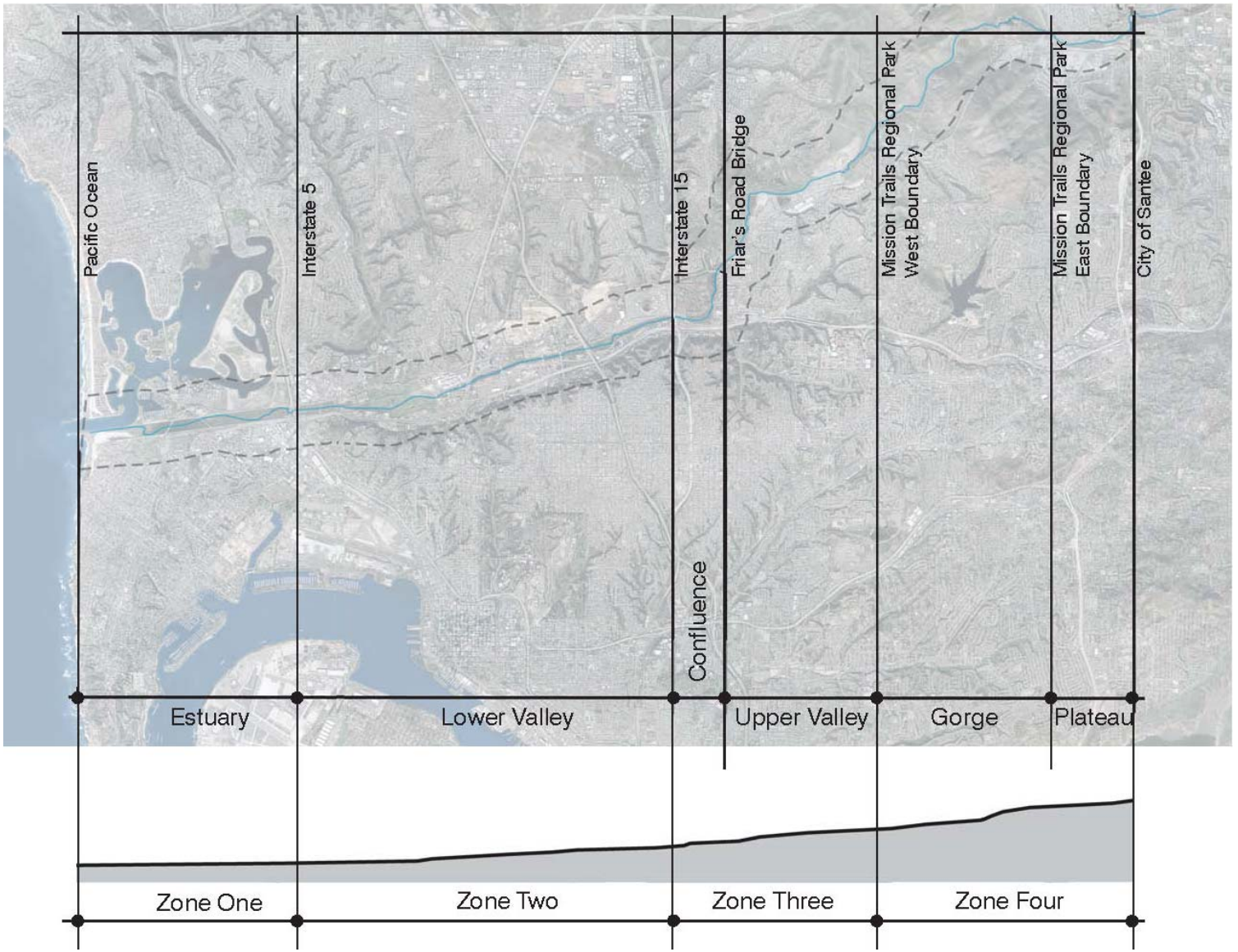
A. Shade structures
B. Picnic shelters
C. Interpretive or scenic overlooks

4.3.3.1 General Architecture Material for Structures

The San Diego River Park Master Plan identifies six reaches within the river valley based on topographic characteristics and river condition. The six reaches comprise four distinct architectural zones, as follows:

Architectural Zone 1: Estuary
Architectural Zone 2: Lower Valley
Architectural Zone 3: Confluence and Upper Valley
Architectural Zone 4: Gorge and Plateau

General architecture material for structures should reflect the local context and be consistent within each reach. The following descriptions establish the basic architectural approach for each architectural zone.



Architectural Zones and Reach Diagram

Architectural Zone 1:

Estuary (Pacific Ocean to Interstate 5)

Influenced by the sea and ocean activities, shade structures, picnic and overlook shelters should be composed of:

- Columns - Metal tensile technology (preferably stainless steel)
- Shade Structures or Roofs - Fabric panels stretched for shade canopies and roofing

Other materials such as glass, sand, shells and native grasses should be integrated as complementary materials. Walls that are part of shade structures, picnic and overlook shelters should be constructed from precast concrete or cast-in-place concrete walls with integral color that reflects the sand found in the estuary.

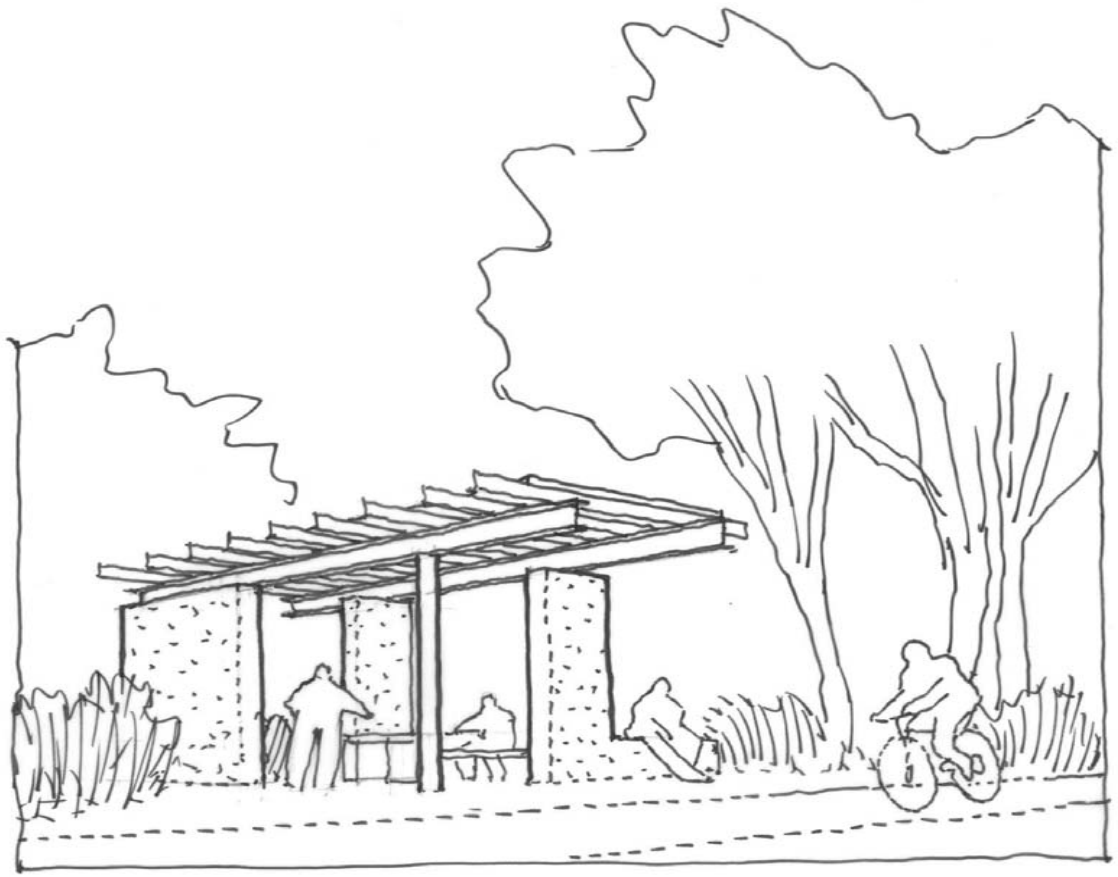
Tensile fabric shade structure for Estuary Reach

Architectural Zone 2:
Lower Valley (Interstate 5 through Mission Valley to Interstate 15)

Influenced by the adobe walls and post and beam structure and expressive of traditional Mission Style architecture, shade structures, shelters and pergolas for picnic areas, and interpretive and scenic overlooks should be composed of:

- Columns – Wood concrete and/or adobe
- Shade Structures or Pergolas - Metal and/or wood lattice
- Roofs - Metal or terra cotta tile on flat or sloped roofs

Other materials, such as terra cotta tile and cobblestones should be integrated as complementary materials. Walls that are part of shade structures, picnic and overlook shelters should be clad in hard coat cement stucco over precast concrete, cast-in-place concrete or concrete block. The stucco should be colored in soft white or abode colors that are similar to the mission walls.



Lower Valley shade structure composed of metal lattice over concrete supports

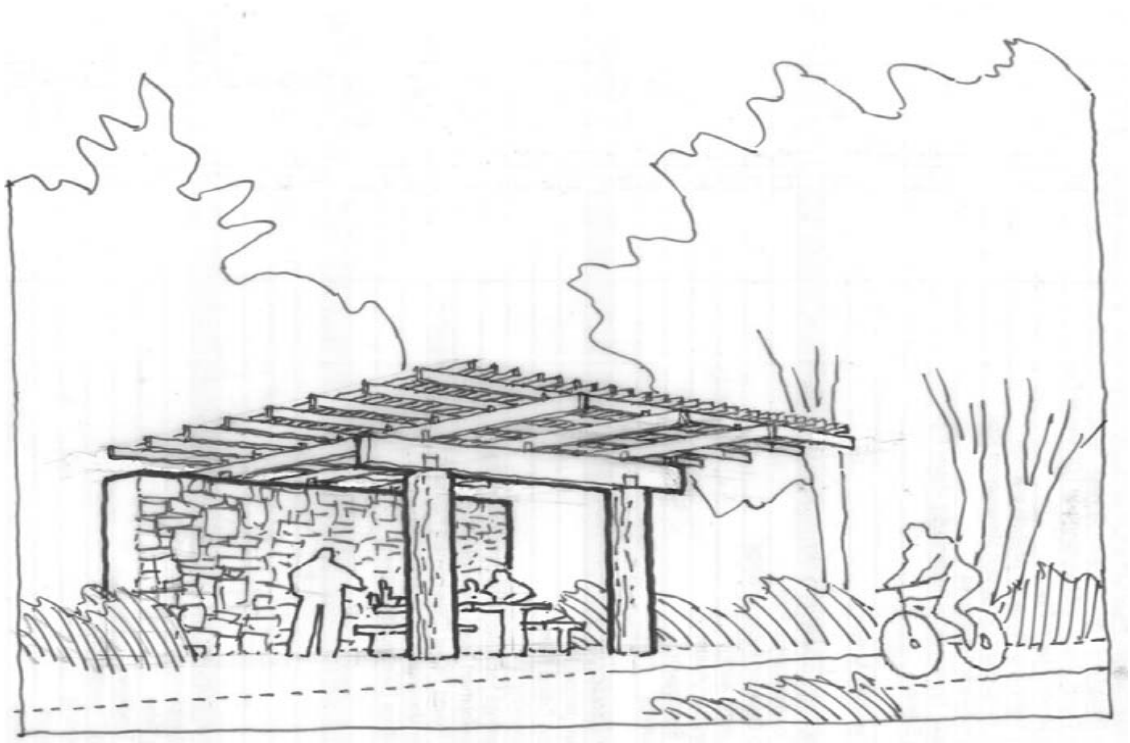
Architectural Zone 3:

Confluence and Upper Valley (Interstate 15 to Mission Trails Regional Park)

Influenced by the cobblestone walls and dams found in the Mission Trails Regional Park, shade structures, shelters and pergolas for picnic areas, and interpretive and scenic overlooks should be composed of: :

- Columns - Native stone and/or wood.
- Shade Structures or Pergolas – Metal or wood lattice
- Walls - Native stone or stone veneer (over precast concrete, cast-in-place concrete, or concrete block colored to match natural colors of the river environment)

Other materials, such as metal and concrete imprinted with upland plants and animals should be integrated as complementary materials.



Confluence/Upper Valley shade structure featuring wood lattice supported by a stone wall and wood columns

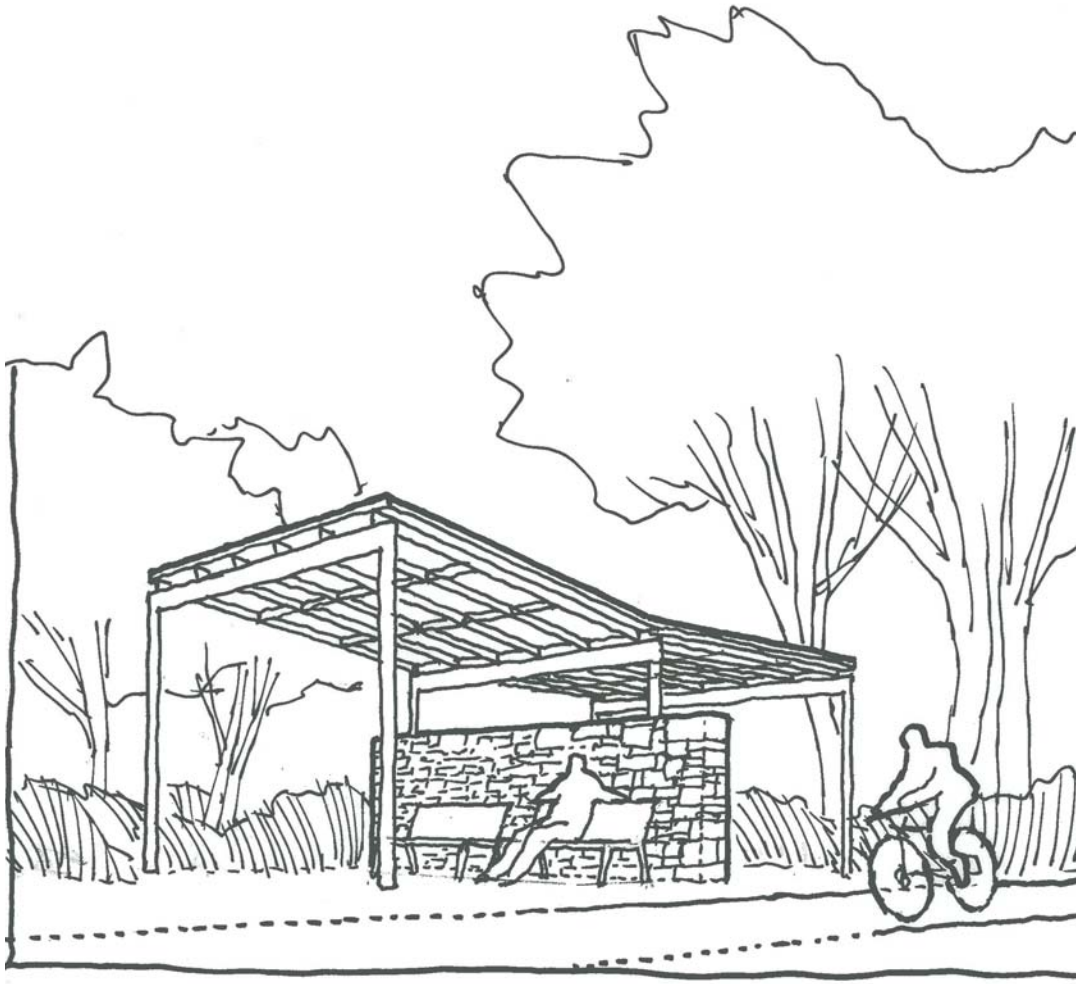
Architectural Zone 4:

Gorge and Plateau (East of Mission Trails Regional Park to City of Santee)

Influenced by the expansive views, rolling hills and grasslands of Mission Trails Regional Park, structures should be generally low and horizontal, influenced by the character of ranch architecture. Shade structures, shelters and pergolas for picnic areas, and interpretive and scenic overlooks should be composed of:

- Columns - Naturally finished metal and/or wood
- Shade Structures or Pergolas - Galvanized and/or corrugated metal on wood beams and/or wood lattice
- Roofs - Metal or wood flat roofs over wood structure
- Walls - Adobe, stone or concrete block for walls (concrete block walls should have the color and texture of adobe or faced with stone)

Other materials such as cobblestones and concrete imprinted with native grasses should be integrated as complementary materials. Note: All structures in Mission Trails Regional Park shall meet Mission Trails Regional Park Master Plan Design Guidelines.



Gorge/Plateau shade structure featuring low, horizontal wood roof with metal columns

4.3.3.2 Placement of Structures

Distribute structures at intervals throughout the River Corridor Area and at locations that offer views, shade or historic interpretation. Locate structures to avoid over-use and crowding in constrained or densely-populated areas. Structures should also be located near points of access to the San Diego River, such as connections to off-site paths, public sidewalks, and parking areas, in order to more easily serve larger groups of people, as well as and people with disabilities.

A. Place structures so as not to interrupt the flow of users of the river pathway.
B. Locate structures at views of the river and valley walls, and take advantage of interesting topographic, historic or scenic conditions.
C. Some structures should be located near public access points, paths and parking areas.
D. Locate structures for visibility from public streets or the river pathway.
E. Structures shall be accessible to persons with disabilities in accordance with Americans with Disabilities Act (ADA) Guidelines and California Title 24 regulations.

Example of structure appropriate for Estuary or Lower Valley

4.3.3.3 Lighting of Structures

Light color should provide true color rendering and be energy efficient. Design lights into the architecture of the structure and discourage use of decorative lights. A balance must be achieved between lighting to provide security and the absence of lighting necessary for a functional wildlife habitat. In general, structures should be under-lit rather than over-lit.

A. Utilize shielded, full cut off, down cast lights.
B. Where possible, as a sustainable alternative, utilize solar power.
C. Lighting must be vandal-proof and easy to maintain.
D. Lights on structures that are located in the MHPA shall meet the requirements of the MSCP Land Use Adjacency Guidelines.

4.3.4 LANDSCAPE ARCHITECTURE FOR THE RIVER CORRIDOR AREA

4.3.4.1 River Pathway Lighting

Lighting of the river pathway may be necessary in some areas for safety and security. Any lighting located within the River Corridor Area should meet or exceed the City of San Diego Park and Recreation Consultant's Guide to Park Design by providing 0.5 foot candle (fc) of sustained lumination. All lighting along the river pathway should be shielded and directed away from sensitive areas to ensure compliance with the MSCP Subarea Plan, Section 1.4.3, 'Land Use Adjacency Guidelines' and pursuant to the Municipal Code Section 142.0704.

The overall conceptual approach to illuminating the River Corridor Area should be to balance safety and security with nighttime visibility and function through light color selection and reduction of glare. The approach should minimize light pollution ("sky-glow") and light trespass (spillage), particularly into adjacent habitat and residential areas. Where lighting is appropriate, it should be treated consistently throughout the River Corridor Area, in terms of light source, fixture type, and fixture finish and color.

Examples of angular, cut-off down-cast lighting

Examples of solar powered lighting

Color of the Light Source

Light color should provide true color rendering and be energy efficient. Reaction time and color recognition are considerably higher under white light sources, such as metal halide.

Standards and Fixtures

A fixture palette that allows lighting to respond to adjacent conditions (urban and naturalized) should be selected for each application. Fixtures should create an unobtrusive appearance that allows the focus to remain on the river, rather than the fixture. Fixtures may be placed on standards designed for each architectural zone, but should coordinate with each other.

Recommended lighting elements are:

A. Metal or concrete round poles of natural sand or warm grey/brown color
B. Triangular style fixtures of natural sand or warm grey/brown color
C. 12 foot mounting height
D. Lights shall be directional and have shields to avoid spilling into the native habitat
E. Solar powered lighting should be used, where possible, as a sustainable alternative

Bollard-type light fixtures can present significant problems of glare and lack of cut-off ability and are more susceptible to vandalism, and are strongly discouraged.

4.3.4.2 Site Furnishings

All site furnishings must be selected in accordance with the City of San Diego's Park and Recreation Consultants Guide to Park Design, meet accessibility guidelines and regulations, and the following guidelines. All furnishings should be durable, comfortable, attractive and securely anchored in place and should have the River Park Logo placed appropriately on the furnishing.

Benches

A. Locate benches at overlooks, areas of shade, under shade structures, etc.
B. Benches should be simple in form, with or without backs, but designed to discourage long term loitering.
C. Construct benches of concrete or stone that have a natural earth brown or tan color of the river valley.
D. Offset benches a minimum of 2 feet from the edge of the river pathway, including its shoulders. The offset area may vary in surface materials, but should coordinate with the materials used around it.
E. Where appropriate, low walls of concrete or stone could be provided at seat height and width in lieu of, or in addition to, benches.

Concrete bench without back

Concrete seat walls located adjacent to multi-use path

Low stone wall used as seating

Concrete bench with back

Picnic Tables

A. Locate picnic tables along the river pathway and place perpendicular to the river pathway to reduce vandalism.
B. Picnic tables should be concrete and have a natural earth brown or tan color.
C. Offset a minimum of 4 feet from the edge of the river pathway, including its shoulders. The offset area may vary in surface materials, but should coordinate with the materials used around it.

Example of concrete picnic table

Drinking Fountains

A. When locating drinking fountains place within 250 feet of picnic tables or at an entrance to the river pathway from an adjacent public street.
B. Drinking fountains should be concrete and have a natural earth brown or tan color.

Accessible (high/low) concrete drinking fountain

Example of concrete picnic table

Trash and Recycling Receptacles

A. Receptacles should be concrete and have a natural earth brown or tan color.
B. Locate receptacles in close proximity to picnic areas, overlooks, seating areas, path intersections and access points to the river.
C. Locate receptacles adjacent to the river pathway to allow for maintenance access.
D. Receptacles should contain hood covers to prevent rummaging by animals.
E. Trash and recycling receptacles should be located side-by-side.

Bicycle Racks

A. Locate bicycle racks near picnic areas, shade structures, overlooks and pedestrian intersections.
B. Bicycle racks should be galvanized metal.

4.3.4.3 Signs

Three categories of signs have been identified for the River Corridor Area: Information kiosks, Interpretative and Directional. Information kiosks provide location maps and the rules and regulations of the area. Interpretive signs provide educational information about the river's history and its environment. Directional signs provide a location, direction and distance along the river pathway. All signs should be designed to withstand vandalism and damage from graffiti, knife gouging, scratching and acid etching.

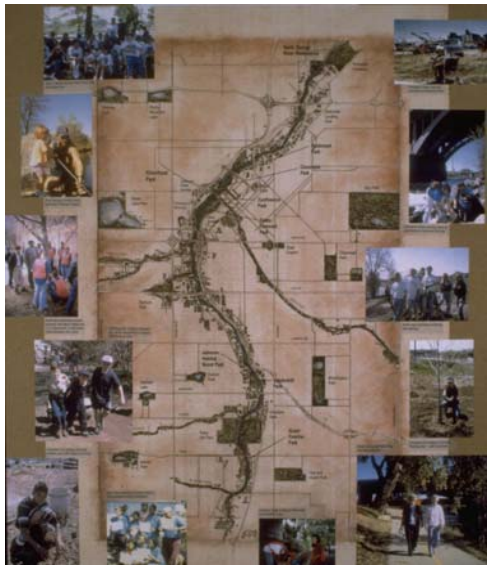
Example of galvanized bicycle racks

Information Kiosks

A. Locate information kiosks at all river pathway entrances from a public street right-of-way.
B. Kiosks should be consistent with City of San Diego standard design as used in regional parks and open space areas. (Contact the City of San Diego Park and Recreation Department for the current standard detail.)
C. Kiosks should include the following information items:

- River Park Map indicating precise location of kiosk within the park
- Detailed local area map, depicting precise location of kiosk, location of parking areas, shade shelters, drinking fountains, interpretive and scenic overlook areas, and all other kiosk locations in either direction, with associated distances shown in miles
- River Park rules and regulations
- Emergency contact number
- River Park logo
- Any other pertinent information, such as seasonal fire warnings

Information kiosk



Example of corridor system map

Interpretive Signs

A. Locate interpretive signs along the river pathway at strategic locations to educate users on significant river park features.
B. Design interpretive signs to be durable and artistically unique to convey the information.
C. Materials for sign frames should include galvanized metal posts with durable panels that will not sun-fade and include the River Park Logo. Sign frames should be simple in design to not distract from the significant features being interpreted.
D. Information and education should be provided on the following topics:
    - Geography and Geology
    - Cultural and Historical Resources
    - Ecology
    - Restoration
    - Native Plant and Wildlife

Examples of interpretive signs at scenic overlooks

Directional Signs

A. Locate directional signs at all points of access and decision, including intersections and street crossings.
B. Use consistent graphics, symbols, and detail of information for directional signs.
C. Directional signs should be a consistent size and mounting height.
D. Directional signs should contain the River Park Logo.

Example of San Diego River Park bike path directional signage

Example of San Diego bike path directional signage

4.3.4.4 San Diego River Park Logo

The San Diego River Park logo is consistent with the river graphic established by the San Diego River Park Foundation and is to be used with the permission of the San Diego River Park Foundation. It shall not be modified in form, but may be modified in material and size. It shall not be used for commercial purposes without written permission from the San Diego River Park Foundation. Artwork for the logo can be obtained from the City of San Diego Park and Recreation Department.

All signs in the River Corridor Area should contain the River Park Logo (refer to Image). Large signs, such as information kiosks and interpretive signs, should provide the full spelling of 'San Diego River Park'. Smaller signs, such as directional signs, may use the logo and the abbreviated spelling of the River Park as 'SDRP'.

All site furniture in the River Corridor Area should contain the River Park Logo. The River Park Logo should be stamped into concrete benches, picnic tables, drinking fountains, and trash and recycling receptacles.

San Diego River Park Logo

4.3.4.5 Vandalism Prevention

All amenities within the River Corridor should be designed or selected to discourage vandalism. All building walls, site walls, concrete site furnishings, and light standards shall be treated with a non-sacrificial (products that do not wash off when maintained) anti-graffiti material. Application specifications shall be per the manufacturer. In addition, graffiti can also be prevented by planting vines and shrubs to cover walls and other areas that might be vandalized.

Various design measures can be employed to discourage vandalism from skateboarding, including the following:

- Roughen pavement surfaces in front of benches, low walls, steps and railings.
- Use pavement cut-outs instead of low planter walls for trees or provide walls with varying height differentials.
- Provide a rough shape to the edges of bench tops, low walls and planter walls for trees.
- Design benches and seating walls with height differentials, arm rests, or seat dividers on the top surface.
- Install circular picnic tables and curved benches instead of rectangular or straight tables or benches.

4.3.4.6 Fences

Fences should only be used in locations to protect sensitive habitat and historic resources. When fences are required, they should be placed on the 100-year Floodway boundary or a minimum 5 feet from the river pathway or trail, where possible. In such areas, fences should preserve views, but discourage passage.

Use natural peeler log fencing for all fences within the River Corridor Area. Fencing shall follow grades along the river pathway and be a maximum of 4 feet in height. Chain link fencing is prohibited within the River Corridor Area to allow for habitat crossings.

Peeler log wood fence

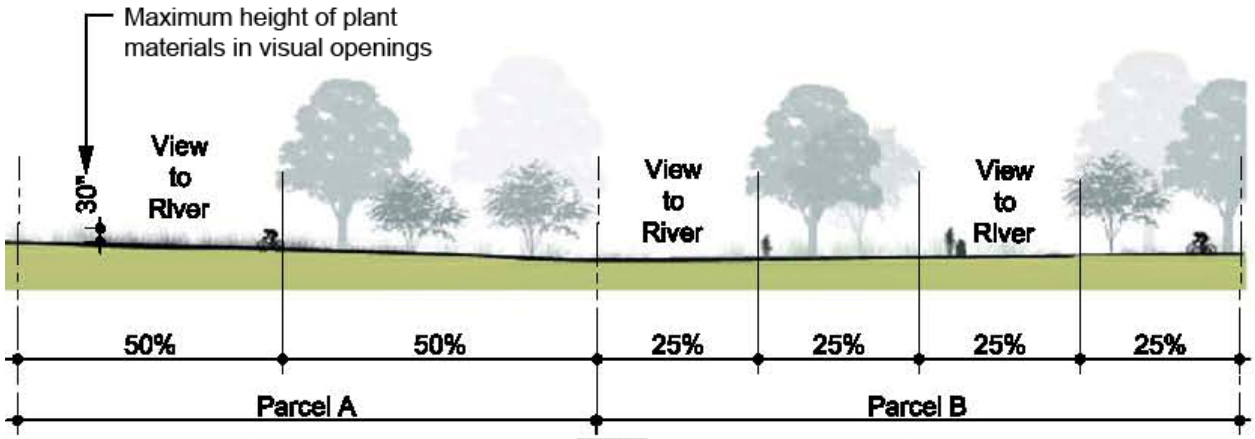
4.3.4.7 Plant Material

Use native trees, shrubs, grasses and perennial plants appropriate to the specific microclimatic, soil and moisture conditions of each river reach within the River Corridor Area. Plant species should be grouped according to plant communities appropriate to the location. Remove all invasive, non-native species and replace with native plant materials.

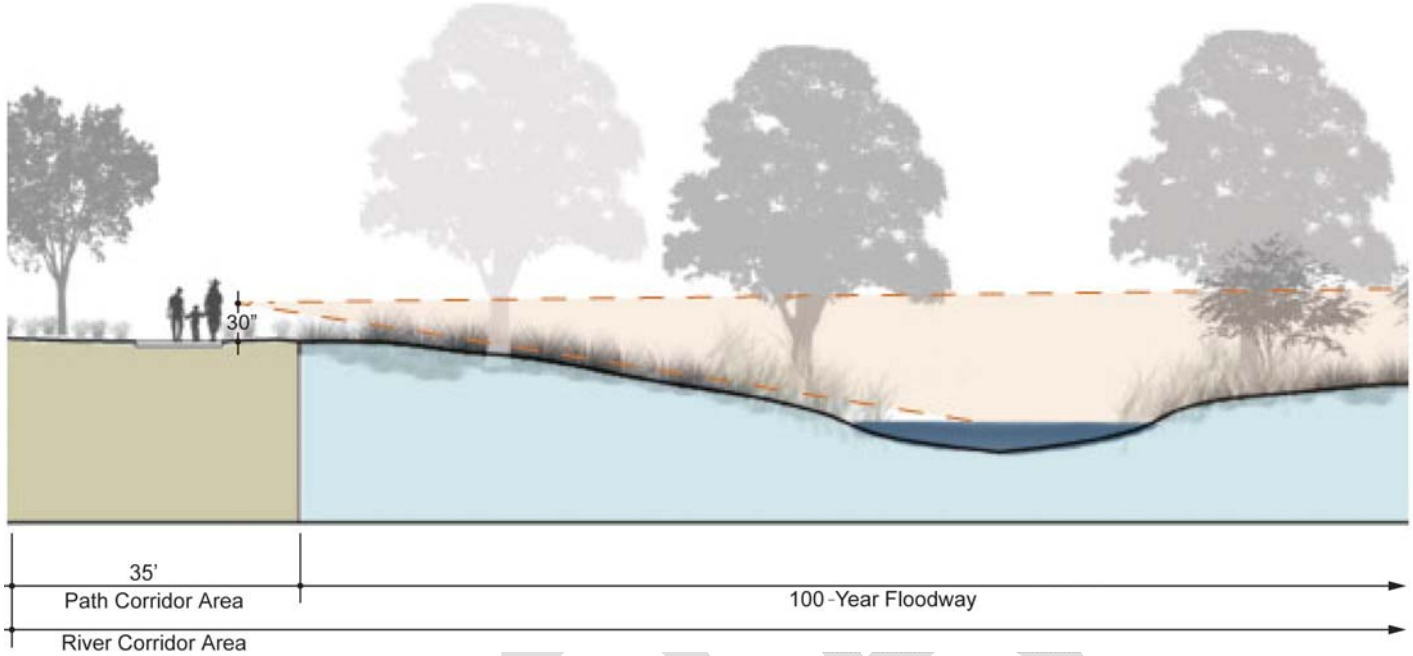
Plant Placement and Views

Plant placement within the River Corridor Area should preserve and enhance views of the river and the river pathway. Also, place plants to preserve and enhance views from public streets that cross the river and passive recreation areas. Plant placement should not compromise the safety and security of the river pathway users.

To enhance visibility at pedestrian levels along the river pathway, plant materials in the river corridor areas shall consist primarily of tall canopy trees and low growing shrubs, with limited use of smaller multi-stem tree species on the non-river side of the pathway. Plant material shall be selected and located so that visual openings with views to the river are provided along at least 50% of the river frontage on each parcel. Plants material within the visual opening shall be naturally low growing with a maximum mature height of 30 inches.



Placement of plant materials to allow views of the river



Section at River Corridor Area depicting views to the river

Plant Transition and Pattern

Plant species selection, variety and pattern should establish a transition in character from the naturalistic quality of the floodway through the Path Corridor to the adjacent River Influence Area.

Within the 100-year Floodway, locate canopy trees to provide some shade to the river. Plant patterns should be naturalistic and informal.

Within the 35 foot Path Corridor, plant patterns should support views, uses, provide shade and define spaces. Visibility and safety should also be a primary concern.

Non-native turf grasses are not acceptable in the River Corridor Area except where neighborhood or community type public parks occur. Public parks may extend non-native turf areas to the non-river side of the river pathway. Drainage of these turf areas shall be contained within the public park and shall not flow over the river pathway into the river.

Examples of parks extending non-native turf to non-river side of multi-use path
Denver, CO

4.3.4.8 Public Art Opportunities

Public art has a role in bringing life and identity to the River Corridor Area. The diversity of culture, history and biology in the San Diego Region and, specifically along the San Diego River, offers the opportunity to engage the public to celebrate and experience the river through artistic expression.

Integrate public art with local cultural and natural systems. Public art should interpret the river and its ecosystems and build upon and emphasize the unique circumstances along the length of the river. Also integrate public art into functional elements within the River Corridor Area, such as site furnishings, structures and signage, consistent with the criteria in these design guidelines. Design public art to be resistant to vandalism and easy to repair if it is damaged.

4.3.4.9 River Pathway and Trail Safety

The river pathway and pedestrian trail development in the River Corridor Area should specifically address issues of safety and crime prevention through the following design considerations:

A. Place removable steel bollards at strategic access points along the river pathway to prevent vehicular access and yet allow access for emergency and maintenance vehicles.
B. Locate safety call boxes where appropriate.
C. Install information kiosks at each entrance or street crossing showing users where they are in the river valley.
D. Directional signs, such as trail markers, should be provided along the river pathway to direct users, especially in areas where following the trail may be difficult.
E. Lighting should be provided at appropriate areas to provide proper surveillance of river pathway access points and picnic areas.

Crime Prevention through Environmental Design

Crime Prevention through Environmental Design (CPTED) is the practice of designing sites, buildings and public spaces with the goal of reducing crime, alleviating the fear of crime and improving quality of life. CPTED is based upon the concept of defensible space, developed by the architect Oscar Newman. According to this concept, all space is defended by the people who use it. If a space is defended by legitimate users, it is protected against crime; if a space is defended by illegitimate users, it cannot be used for its intended purpose. The premise of CPTED is that crime and misbehavior can be controlled by designing a space to encourage legitimate use, and discourage illegitimate use. Today, CPTED principles are employed by planners, designers and law enforcement officers to prevent crime. Designers can consider the following guiding principles to incorporate CPTED into a site design:

A. Natural Surveillance - Encourage legitimate activity and provide visual access to spaces, in order to increase the number of people using, watching and caring about the place.
B. Territory Reinforcement - Ensure that the transitions between private and public space are visible, so that people have an appropriate perception of how spaces are meant to be used.
C. Access Control - Clearly communicate where people are allowed and not allowed to be to prevent illegitimate use of space.
D. Maintenance - Ensure that development is designed in a way that reduces maintenance needs after construction. Poorly maintained spaces send a signal that the community is willing to tolerate negative activities in these spaces.
E. Appropriate Use - Utilize design rails and decorative ledges to discourage skateboard use of seating walls. Avoid blank walls that can provide a blank surface for graffiti.

4.4 RIVER INFLUENCE AREA

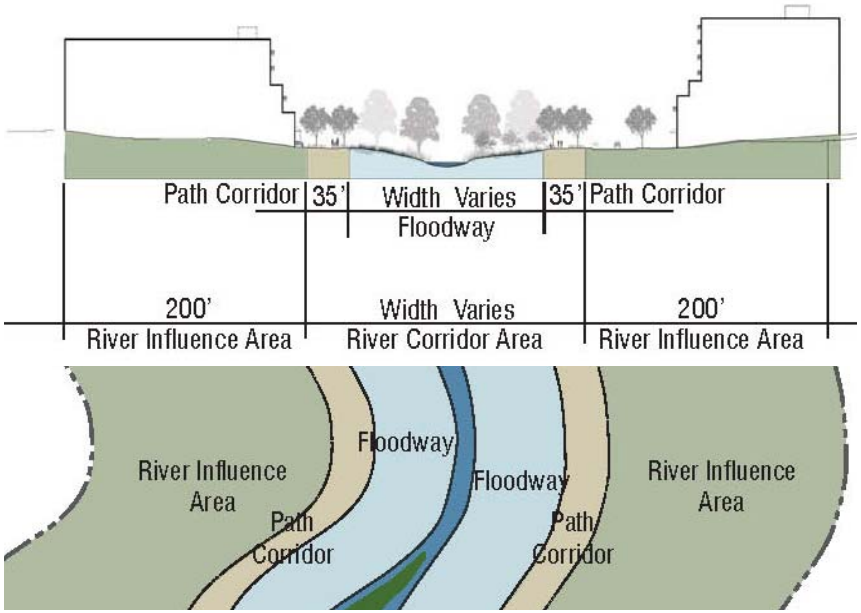
4.4.1 PURPOSE AND DEFINITIONS

4.4.1.1 Purpose

The purpose of the River Influence Area is to create a quality backdrop to the River Corridor Area through design that; treats the river as an amenity; orientates development toward the river; encourages mixed-use development, includes active uses along the river pathway and public access to the river.

4.4.1.2 Definition and Boundaries

The River Influence Area is defined as the 200' wide area abutting the River Corridor Area on both sides of the river.



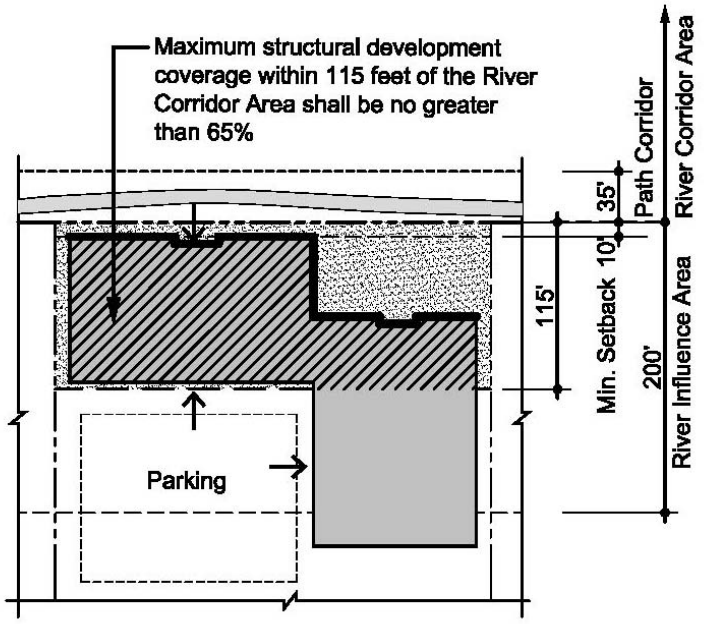
Plan and Section of River Corridor and River Influence Areas

4.4.2 SITE PLANNING FOR THE RIVER INFLUENCE AREA

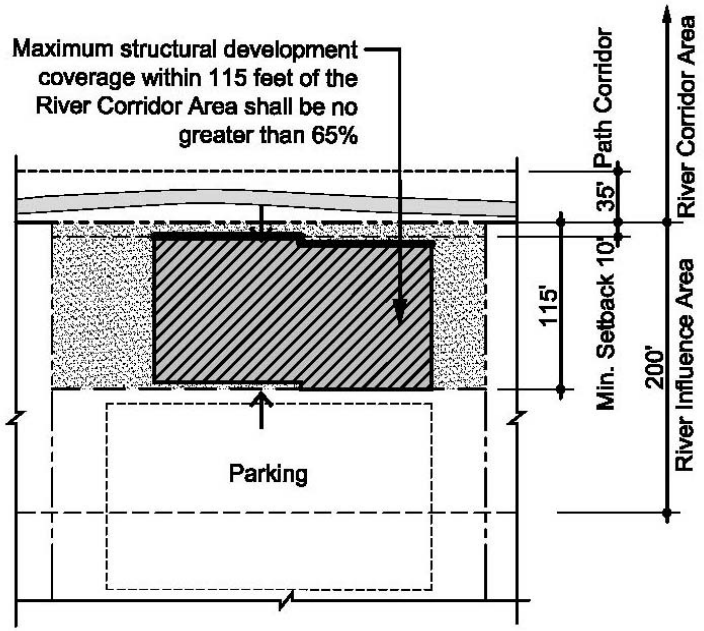
Development within the River Influence Area should be oriented to engage the river, taking advantage of the river environment as a park amenity while simultaneously providing informal oversight of the river park. In addition, development should define the edge and boundary of the River Corridor Area to reinforce and/or establish the corridor identity and image. Structures should be located and shaped in a manner that opens up views to the river from nearby districts, neighborhoods and hillsides and a structure's location and shape on the site should create a spatial transition to the river. The active uses of a structure should be focused toward the river and inactive, 'back-of-house' and service uses should be directed away from the river.

4.4.2.1 Maximum Structural Development Coverage

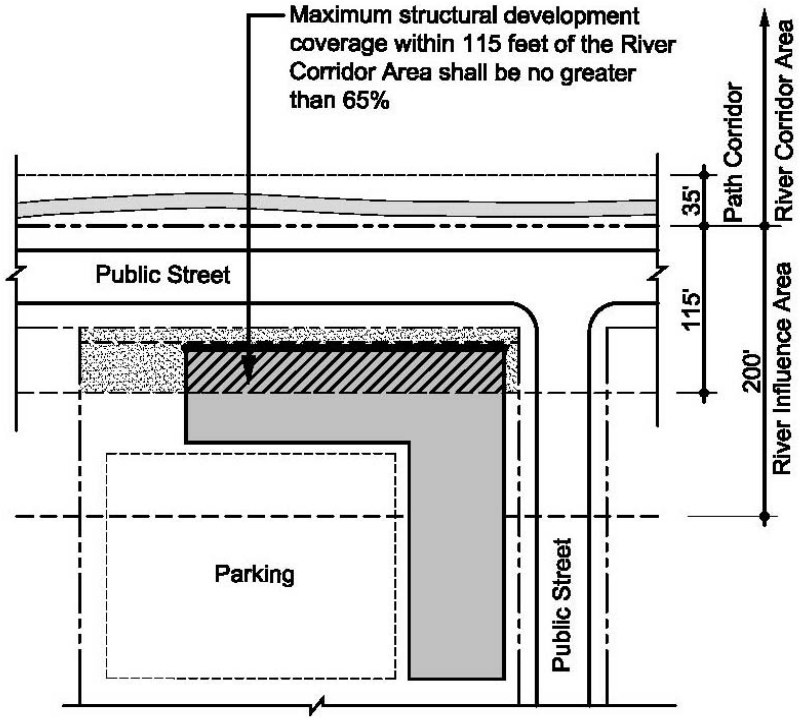
The maximum structural development coverage of a parcel within 115 feet of the River Corridor Area shall be 65%. This maximum structural development coverage is an existing requirement of the Mission Valley Planned District Ordinance and therefore only applies to the Mission Valley Planned District area; all other areas along the river are per the community plan or the underlying zone.



Maximum structural development coverage depicting property adjacent to the River Corridor with open space/or plaza adjacent to the river pathway



Maximum structural development coverage depicting property adjacent to the River Corridor with open space evenly distributed on either side of the building

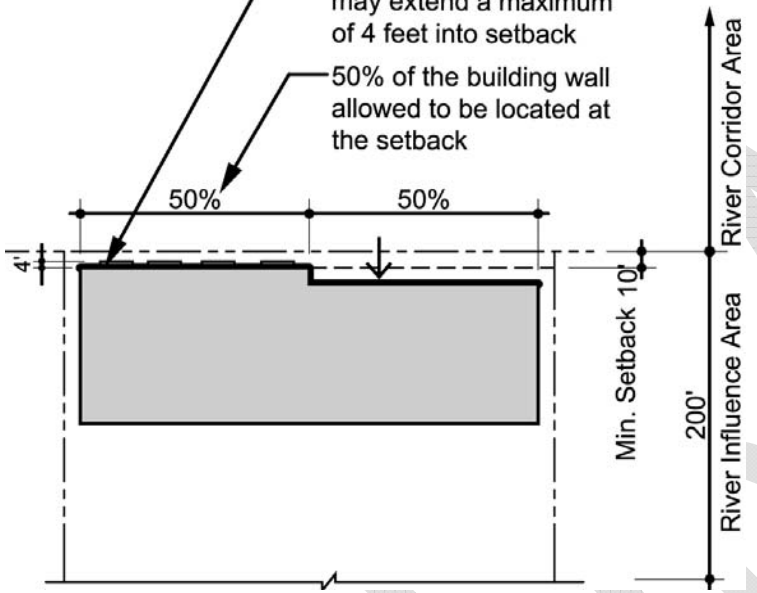


Maximum structural development coverage depicting property located at street adjacent to the River Corridor Area

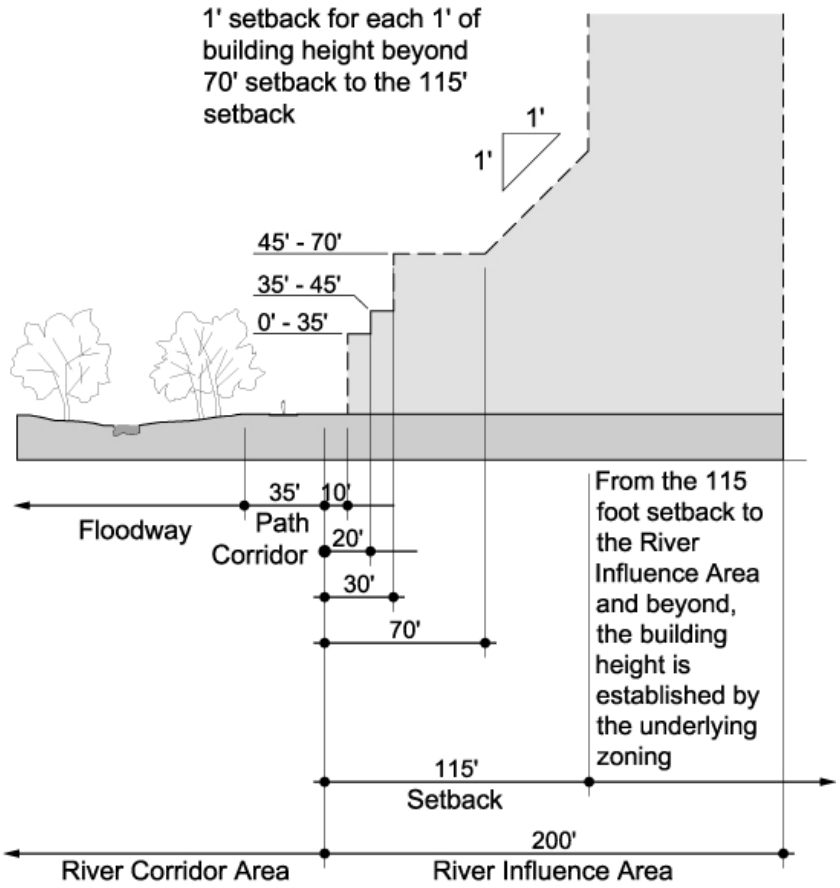
4.4.2.2 Building Heights and Setbacks

Buildings on lots adjacent to the River Corridor Area shall adhere to the following setback requirements unless the base zone is more restrictive. Building heights shall be measured according to Municipal Code.

A. A minimum 10' setback is required for buildings up to 35 feet in height. A maximum of 50% of the building wall may be located at the setback. The remaining building wall shall be per the Offsetting Planes and Façade Variation Requirements of the Municipal Code. Architectural projections such as eave, cornice, eyebrow, trellises, bay windows, fireplace, entry roof, entry arbors, balconies, and bay windows may extend a maximum of 4 feet into the 10 foot setback and shall not be closer than 6 feet to the River Corridor Area.
B. A minimum 20 foot setback is required for buildings between 35 feet to 45 feet in height.
C. A minimum 30 foot setback is required for buildings between 45 feet to 70 feet in height.
D. At 70 foot setback, the maximum building height allowed shall not exceed 1foot of setback per each 1 foot of building height (45 degrees).
E. At a minimum 115 feet setback, building heights shall be determined by the underlying zone.
F. Where River Influence Area and street setbacks overlap, the setback requirements of the River Influence Area shall apply.



Building setback diagram



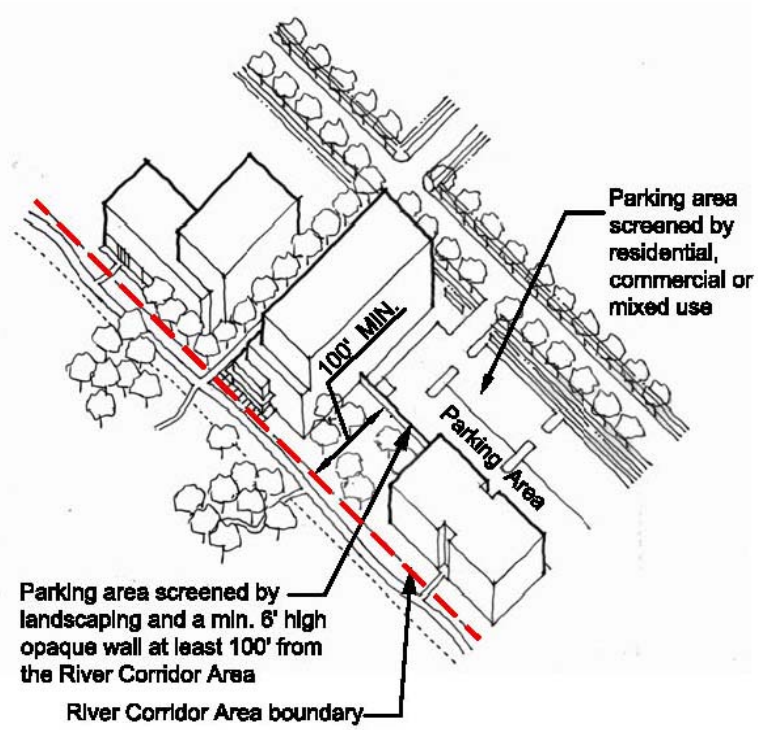
Building heights and setbacks

4.4.2.3 Exterior Equipment Enclosures, Outdoor Storage, Loading Areas and Refuse Collection Areas

Such areas and enclosures, including utility and mechanical equipment, shall be located a minimum of 100 feet from the River Corridor Area and screened by landscaping and an opaque wall at least 6 feet high, or 1 foot higher than the item to be screened if item exceeds 6 feet in height. Opaque walls shall be designed and composed of materials of the same quality as the primary building façade.

4.4.2.4 Off-Street Surface Parking

Off-street surface parking shall not be visible from the River Corridor Area. Parking areas should be screened with permitted residential commercial and/or mixed use structures. Alternatively, off-street surface parking shall be located a minimum of 100 feet from the River Corridor Area and screened by landscaping and an opaque wall at least 6 feet high, or 1 foot higher than the item to be screened if item exceeds 6 feet in height. Opaque walls shall be designed and composed of materials of the same quality as the primary building façade. No curb cuts and driveways shall be located between the building walls and the River Corridor Area except where a public street is located between the building and the River Corridor Area.



Off-street surface parking screened from River Corridor Area

4.4.2.5 Parking Structures

Façades of parking structures that that face the River Corridor Area shall be developed with permitted residential, commercial and/or mixed use structures for the full height and width of the parking structure.

4.4.2.6 Site and Parking Lot Lighting

Site and parking lot lighting within 100' of the River Corridor Area shall be provided by full cut-off luminaries designed to incorporate elements to reduce glare such as translucent, obscure or refracting lenses, low wattage light sources or shielding devices. Through the use of lighting design and shielding devices internal to the luminaire, there shall be no light spillage into the River Corridor Area and lighting should be directed away from sensitive areas to ensure compliance with the MSCP/MHPA Land Use Adjacency Guidelines.

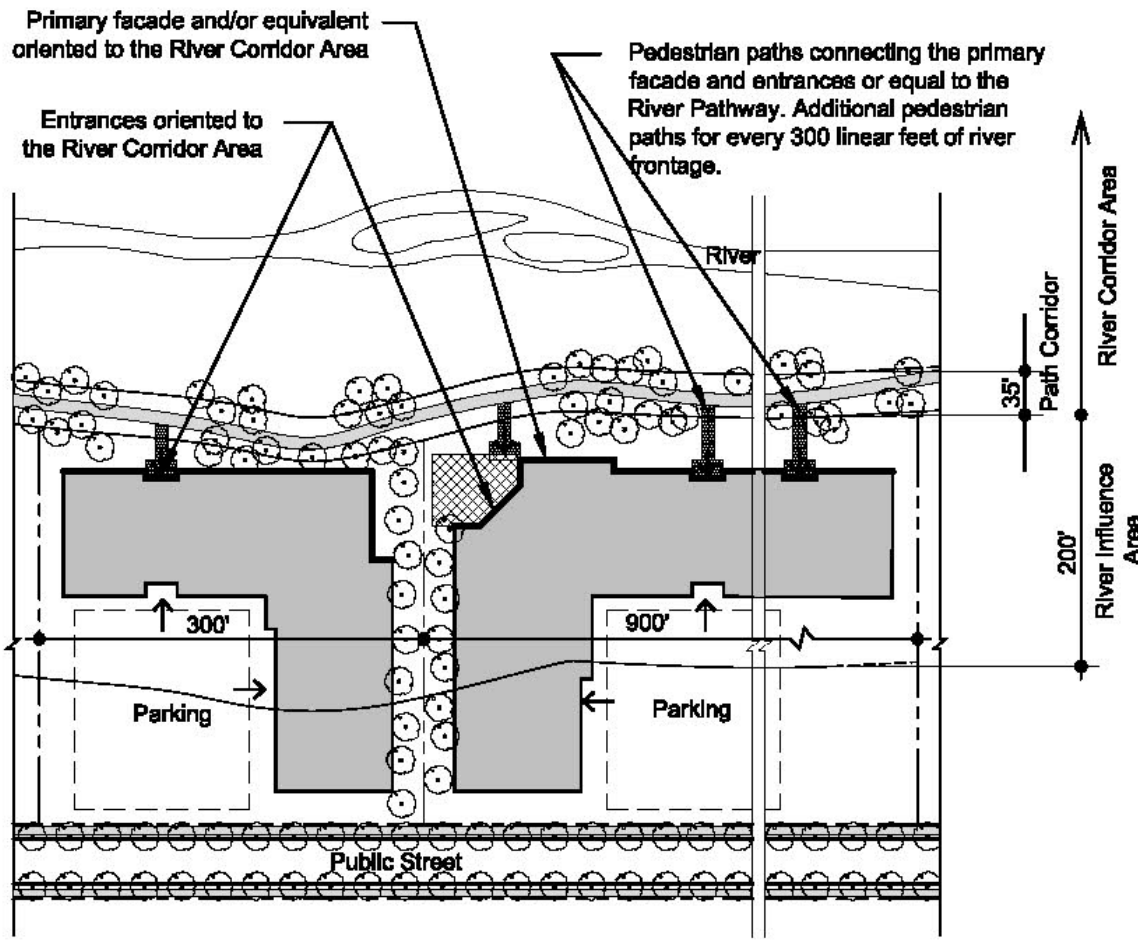
4.4.2.7 Building Façade, Entrance and Access Adjacent to the River Corridor Area

Development that abuts the River Corridor Area shall provide the following:

A. Buildings structures shall orient a primary facade and entrance or its equal in design and materials to the River Corridor Area.

B. A pedestrian path from the river side of the building to the river pathway shall be provided. Additional pedestrian paths shall be provided for every additional 300 linear feet of river frontage measured along the property line.

C. The pedestrian path shall be designed utilizing the same materials as the primary entrance.



Building Façade entrance and access adjacent to the River Corridor Area

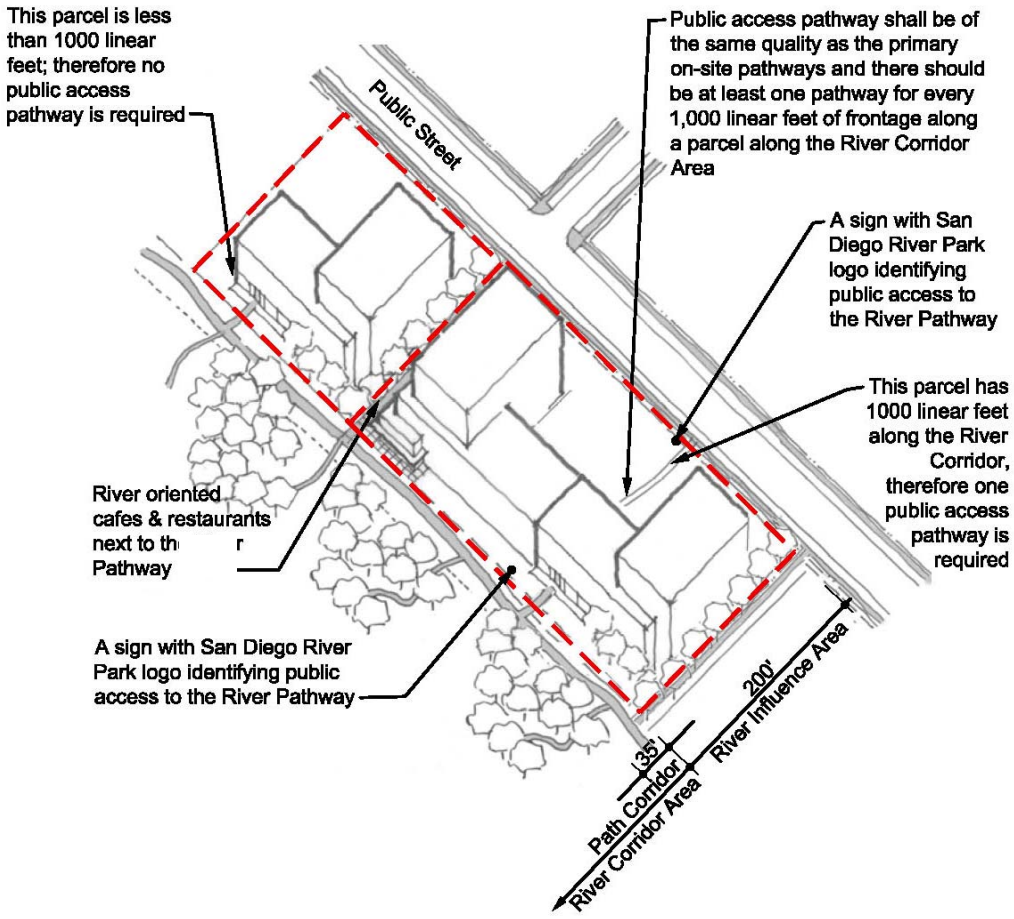
4.4.2.8 Public Access Pathway Across Development

Development that abuts the River Corridor Area shall provide public pedestrian access pathways connecting the public street and the river pathway consistent with the following:

A. At least one public pedestrian pathway for every 1,000 linear feet of frontage along the River Corridor Area per parcel.

B. The public access pathway shall be part of the overall design of the site and a feature within the landscape design. This pathway shall be the same design and materials as the primary on-site pathways.

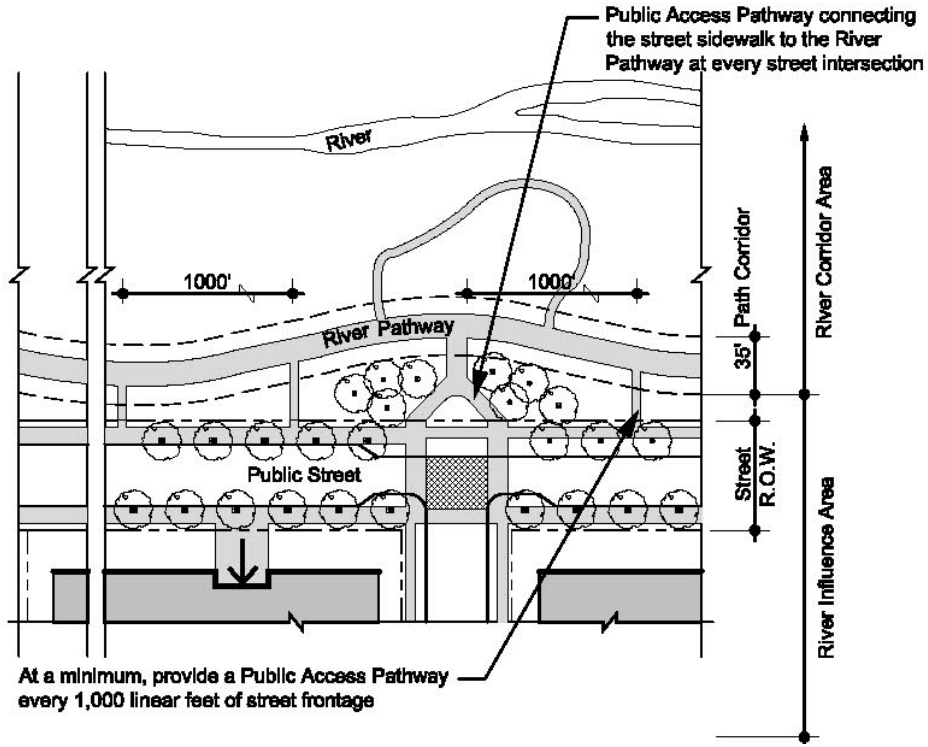
C. Signage, identifying public access to the river pathway shall be located at the intersections of the public access pathway and the street right-of-way, and the public access pathway and the River Corridor Areas. The public access pathway sign shall be at a minimum made of aluminum, sized no smaller than 18 inches by 24 inches. The sign shall be mounted on a metal pole at least 4 feet above finish grade and include the San Diego River Park Logo and these words: Public Access Pathway to the San Diego River'. Size of letters shall meet ADA guidelines.



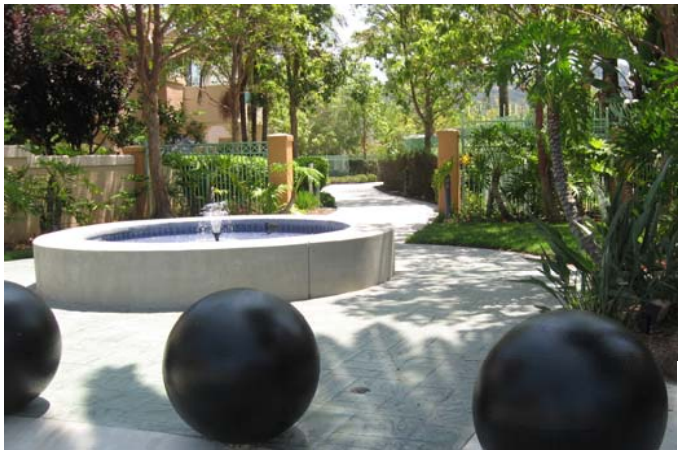
Public Access Pathway across Development

4.4.2.9 Public Access Pathway from Streets that Abut and/or Parallel the River Corridor Area

Public access pathways shall connect the street right-of-way to the river pathway at every street intersection and, at a minimum, provide a connection every 1,000 linear feet of frontage along the River Corridor Area.



Public Access Pathway to the river from streets that abut and/or parallel the River Corridor Area

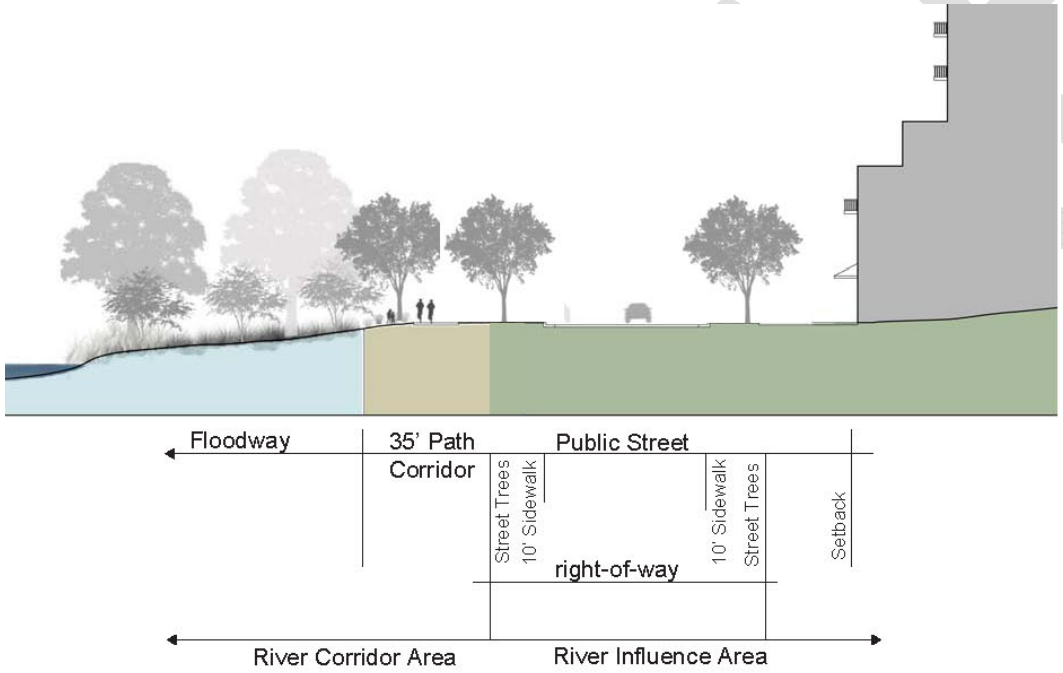


Examples of public access pathway connecting to the River Pathway across private development

4.4.2.10 Streets that Abut and/or Parallel the River Corridor Area

Public streets should be located adjacent to the river wherever possible. This allows building activities and main entrances to naturally orient themselves towards the river. The street creates ample public access points and views to the River Corridor Area and eliminates the necessity for long lengths of fencing along private property.

A. Streets shall be no wider than necessary to provide for auto, fire and police vehicle access to the River Corridor Area and adjacent development per the City's Street Design Manual of the Land Development Manual.
B. Curb cuts and driveways shall be minimized.
C. The use of common and joint use driveways should be considered, where possible.
D. Where on-street parking is allowed along the river side of the street, parking shall be provided in parking bays or clusters to allow for views of the river.

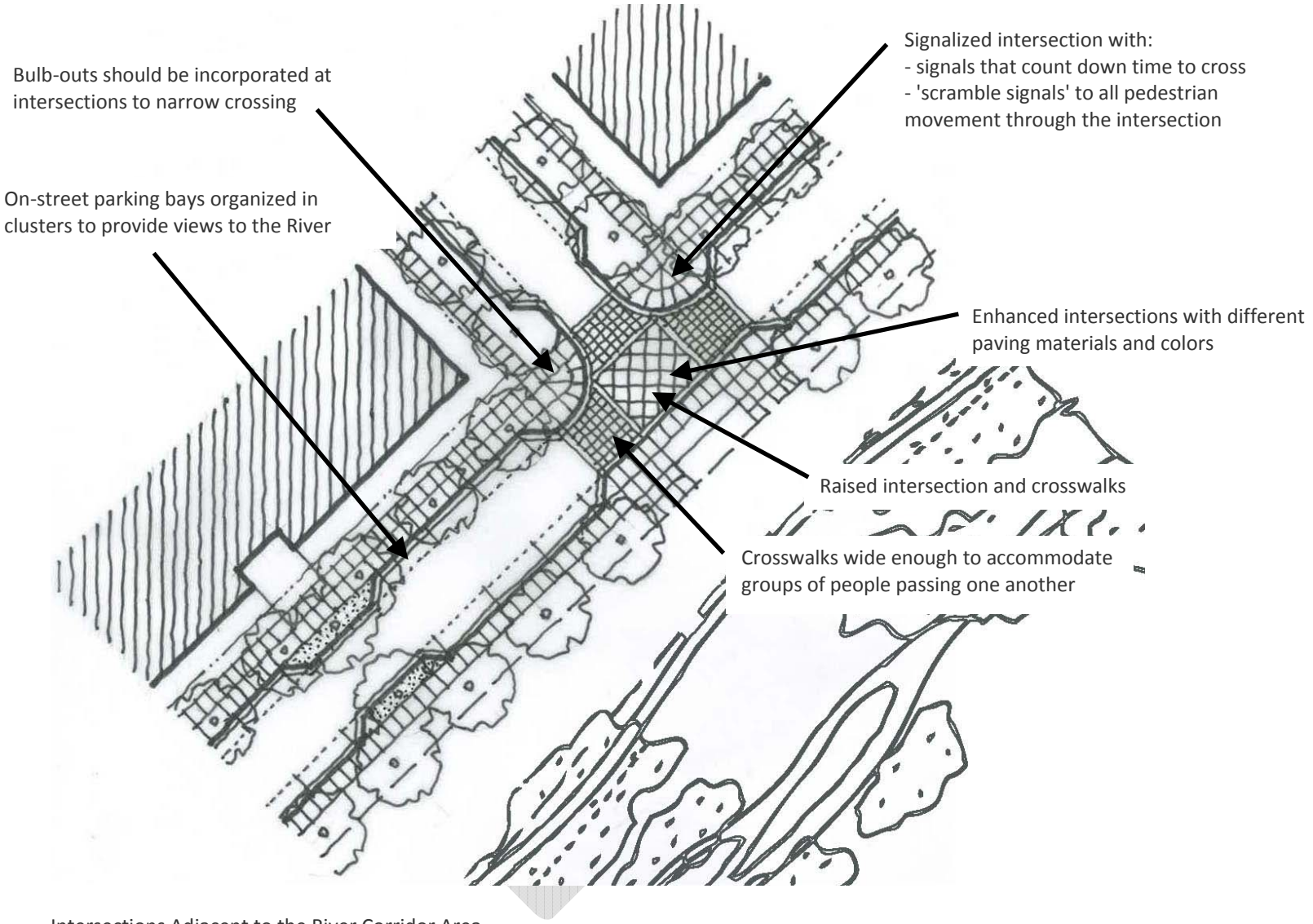


Street section parallel to the River Corridor Area

4.4.2.11 Street Intersections Adjacent to the River Corridor Area

Street intersections adjacent to the River Corridor Area should be designed in a manner to establish a clear pedestrian priority in the street. The following should be considered:

A. Crosswalks should be of a different paving material and color than the street.
B. Crosswalks should be wide enough to accommodate groups of people passing one another.
C. Bulb-outs should be incorporated at intersections to narrow crossing width and to provide traffic calming.
D. Crosswalks should have signals that count down time to cross.
E. Intersections should be designed with 'scramble signals' to all for all pedestrian movement through the intersection.
F. Intersections and crosswalks should be raised above street level to match the level of the connecting public sidewalk to provide traffic calming.

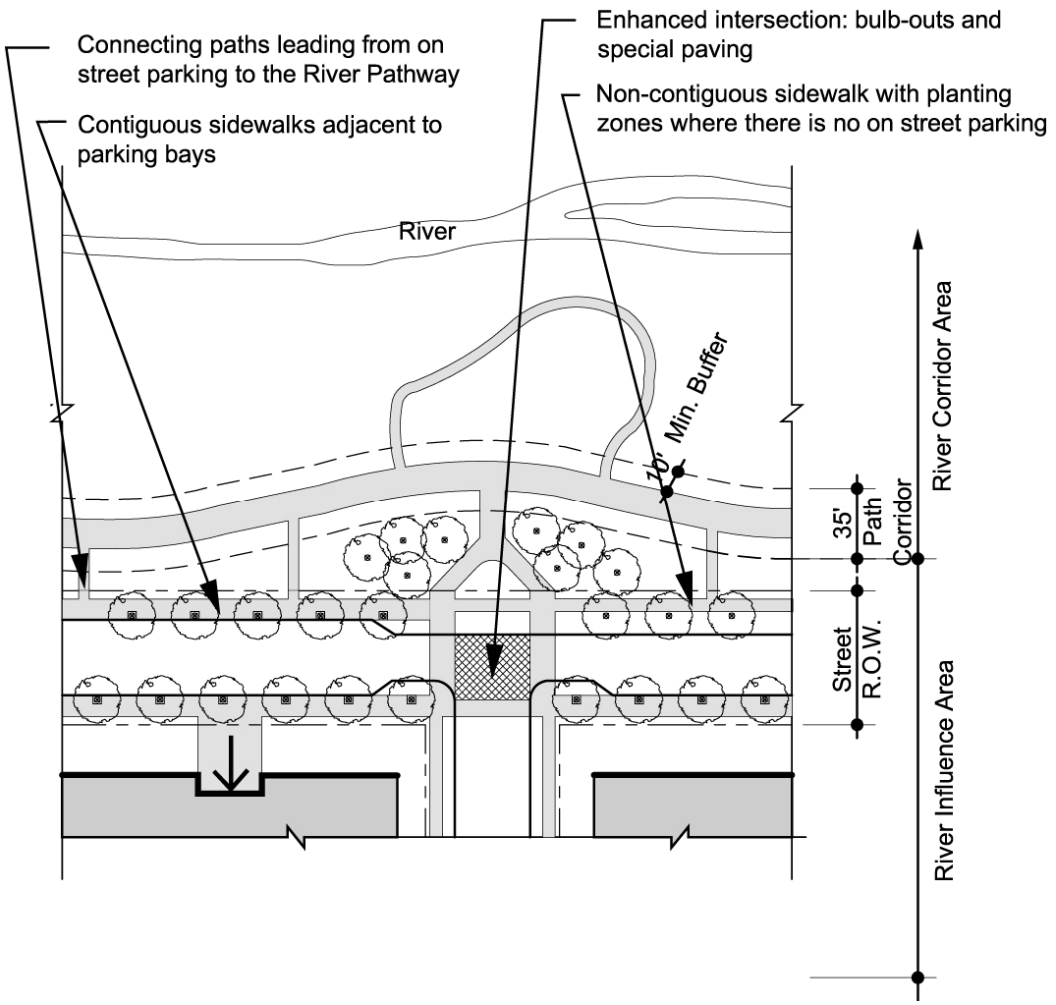


Intersections Adjacent to the River Corridor Area

4.4.2.12 Location of Public Sidewalks Parallel to River Corridor Area

A. Provide non-contiguous public sidewalks where there is no on-street parking.

B. Provide contiguous public sidewalks where there is on-street parking or parking bays to function as an access point form the vehicles to connecting paths to the river pathway.



Location of public sidewalks parallel to the River Corridor Area

4.4.3 ARCHITECTURE FOR THE RIVER INFLUENCE AREA

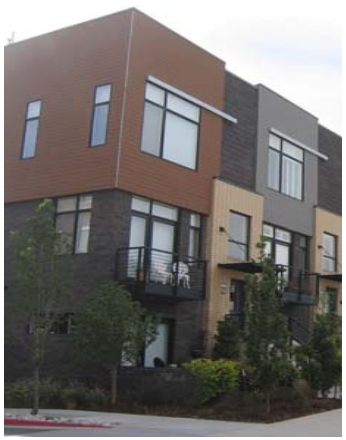
The purpose of the architectural guidelines is to reinforce the vision of the river park as a community amenity by promoting quality architectural design, detailing and building materials within the River Influence Area.

4.4.3.1 Building Massing

The appearance of bulky building structures shall be minimized to produce the impression of an aggregate of parts rather than a single building mass. Above 45 feet in height, buildings shall orient the narrow side of the building façade parallel to the river and the wider side of the building perpendicular to the river. Buildings shall be designed to create visual interest by varying form and façade and avoiding repetition and monotonous, block-like visual impact. Building levels and planes should vary to create visual interest and to help define view corridors.

4.4.3.2 Variety and Human Scale

Interest, variety and human scale should be exhibited within building façades that face the River Corridor Area. Such variety is achieved by changes in building or roof form, recesses or extensions of the façade form, window and curtain wall patterns, shading devices, balconies, material changes, color variation, and surface pattern and texture changes.



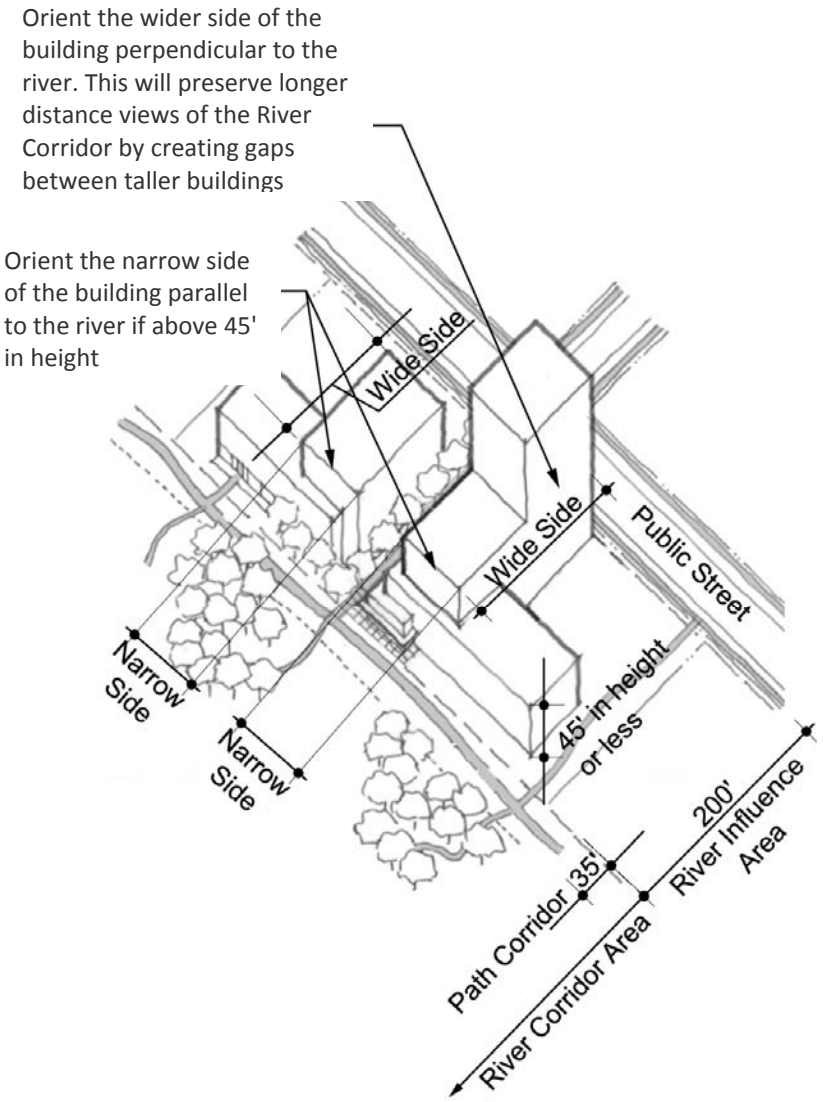
Examples of variety and human scales

Example of varying building form, massing and façade treatment

4.4.3.3 Quality of Materials

High quality and durable materials should be selected for all building façades that can be viewed from the River Corridor Area, face streets that lead directly to or adjoin the River Corridor Area, or face parks or open spaces that adjoin the River Corridor Area. Materials which are allowed to be used within the River Influence Area include, but are not limited to:

A. Metal
B. Glass
C. Architectural precast concrete or architectural cast-in-place concrete
D. Stone
E. Brick
F. Wood
G. Hard coat cement stucco
H. Concrete block which is stained, integrally colored or specially textured; architecturally-treated concrete block
I. Tilt-up concrete panels which are stained, painted, specially textured or patterned
J. Glass fiber reinforced cement panels

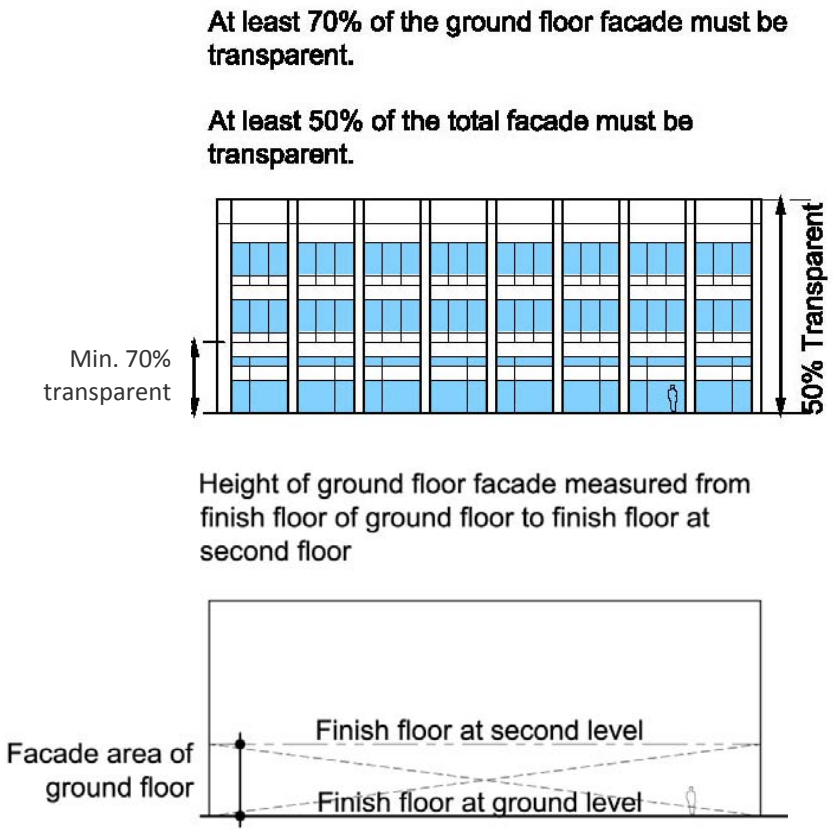


Building massing adjacent to River Corridor Area

4.4.3.4 Building Transparency

Building Transparency shall apply to all building façades that face the River Corridor Area or that face a street abutting and/or parallel to the River Corridor Area, as follows:

A. Residential Zones: At least 50% of the total facade must be devoted to transparency such as: glass windows, display windows, or windows affording views into any space related to the residential use, such as retail, customer services, office, gallery, cafes, lobby space or pedestrian entrances.
B. Commercial and Mixed Use Zones: At least 50% of the total façade must be devoted to transparency such as: glass windows, or windows affording views into retail, customer services, office, gallery, cafes, lobby space or pedestrian entrances. At the ground floor, measured from finish floor of ground floor to finish floor at second floor, at least 70% of the total façade must be devoted to transparency.
C. Industrial Zones: At least 25% of the total façade must be devoted to transparency such as: glass windows, display windows, or windows affording views into customer services, office, gallery, cafes, lobby space or pedestrian entrances.
D. The coefficient of transparency for glass, the Visible Light Transparency (VLT), shall be at least 65% (0.65) VLT.



Transparency diagrams for commercial and mixed use zones

4.4.3.5 Building Reflectivity

All building façades that face the River Corridor Area or face a street that is parallel to the River Corridor Area shall incorporate glass and other materials with a visible light reflectivity factor (VLR) no greater than 10% (0.10 VLR).

4.4.3.6 Building Lighting

Within 100 feet of the River Corridor Area, exterior building lighting shall be shielded with full cut-off, down cast lighting.

4.4.3.7 Building Signs

A. Signs shall conform to Chapter 12, Article 9, Division 8 (Sign Permit Procedures) and Chapter 14, Article 2, Division 12 (Sign Regulations).
B. Within 100 feet of the River Corridor Area, tops of signs attached to buildings shall not exceed 15 feet in height above adjacent grade.
C. Ground signs between the building and the River Corridor Area shall be monument signs not to exceed 5 feet in height and shall be located within a landscaped area at least equivalent to the square feet of the sign face.

Examples of monument signs not exceeding 5’ in height

4.4.4 LANDSCAPE ARCHITECTURE FOR THE RIVER INFLUENCE AREA

The purpose of the Landscape Architecture Guidelines is to integrate the landscape of the River Influence Area with the landscape character and materials of the River Corridor Area. All landscape areas within the River Influence Area shall be in conformance with Land Development Code, Chapter 14, Article 2, Division 4 (Landscape Regulations).

4.4.4.1 Public Art for Private Development

Art within the River Influence Area should be designed to celebrate and enhance the river experience, as well as to complement the natural colors and textures of the river valley. The placement of public art is encouraged to be viewed not only from the River Influence Area, but also from the river pathway in the River Corridor Area. Art opportunities proposed for private property are encouraged, but will remain at the discretion of the private property owner. The City of San Diego Arts Commission can provide assistance for the selection process of artists on projects. Public art should be integrated into functional elements, such as site furnishings and signage, to engage and educate the public about the river park and its environs.

4.4.4.2 Fences and Walls

Fences and walls shall provide security and screening without visually walling-off the River Corridor Area. Chain link fencing of any type is prohibited within the River Influence Area. Within the 10' building setback from the River Corridor Area, the following fences and walls are allowed:

A. Solid fences or walls not exceeding 3 feet in height.
B. Fences or walls of 6 feet in height that are 75% open/transparent.
C. A combination of a 3 feet solid fence or wall topped with a 3 feet fence or wall that is 75% open/transparent.

6' fence with 75% minimum transparency

4.4.4.3 Plant Material

Landscape material should transition from native plant materials within the River Corridor Area to non-invasive, drought tolerant plant materials in the River Influence Area. Plant material selected for areas abutting the River Corridor Area should complement the native plants through color, texture and forms. Plant materials within the River Influence Area should frame and enhance views of the River Corridor Area.

3' wall, with 3' high, 75% transparent fence attached