



Park Design Guidelines

City of Sacramento Department of Parks and Recreation Landscape Architecture Section

These Park Design Guidelines contain conceptual guidance for improved park amenities.

Park Design

- Provide one main park entry, which gives a sense of arrival, and entry to the park. Provide the following at the park entry, the park name sign, in a planted area with flowering trees, special paving, and possibly drop-off seating.
- Where applicable, locate main entrance to park near bus stop or crosswalk.
- Provide a separate entry for maintenance vehicles away from the main pedestrian park entry.
- Create a circulation system that leads people past amenities without forcing them to stop.
- Provide direct access to the play area, restroom and sports fields.
- Place play areas a minimum of fifty feet (50') from the street or parking lot. Play areas closer than twenty-five feet (25') shall be surrounded by a three foot (3') high tubular steel fence.
- Site play areas near the main circulation route and near group picnic areas and open lawn areas.
- Sports courts should be located along the edges of the park to maximize visibility for security. Provide some separation from the street (fifteen to twenty feet - 15' – 20') such as a low berm or low landscape buffer.
- Provide for the optimum orientation of sports fields.
- Sports courts shall be oriented with the long axis north south.
- Park design shall allow for large contiguous turf areas.
- Adequate parking shall be provided at each community and Regional Park location to minimize parking problems on residential and arterial streets.
- Restroom facilities shall be provided in all community and regional parks and in heavily used neighborhood parks.
- Parks are to be designed with an emphasis on conjunctive use and multi-use recreation areas and facilities to efficiently utilize park resources.
- All individual master plans for new park development shall be subject to a master plan approval process that requires final approval by the Citizen's Advisory Committee for Parks and Recreation.
- The City shall strive to emphasize unique and innovative design and promote individual character in the design of each park site. Sites, facilities, structures or landscapes of historic or cultural significance within each park shall be identified and included where possible in the park design.
- Neighborhood parks shall not contain community centers, swimming pools, wading pools, on-site parking or field lighting. There shall be no restrictions on recreation elements for the community or regional parks.

- Develop a distinct theme for each park when appropriate, to establish a unique character that is consistent with the park's activities and locations. The theme shall be implemented through the use of characteristic architectural details, colors, materials, furnishings, play equipment and plant selection.
- Provide a unified park design by providing repeated details, colors and materials throughout the park.
- A site master plan of each park shall be developed through a public involvement process prior to site development or renovation. Wherever possible, the residents of the park's service area shall be consulted for assistance in choosing the recreation elements to be included in the park.
- Design community and regional parks for night use, as appropriate. Lighting at night shall provide for safety, and anticipated recreational uses, while limiting glare impacts on nearby residential areas.
- Concession or public/private enterprise opportunities shall be included in existing and future community and regional park plans as appropriate.
- Rest areas in parks and open space shall be sited along trails where appropriate. Rest areas shall include bike racks, drinking fountains, shade and picnic facilities.
- Provide adequate access for fire, emergency and maintenance equipment in parks and open space.
- Promote the use of drought tolerant and native plant material where appropriate in parks.
- Develop a signage system on trails, which provides users with trail information, such as safety regulations, interpretative opportunities and distance.
- Design park facilities to minimize water use and Parks and facilities shall be designed to enhance and preserve the natural site characteristics as appropriate and to minimize water use and maintenance demands pursuant to the City's Water Conservation Ordinance.
- Natural landscape features are desirable in some park designs, which include natural plantings, water features, rock features, or earthforms.

Grading

- Do not grade turfed slopes steeper than 5:1, as it cannot be easily mowed.
- Crown playing fields such as baseball, softball and soccer, at a minimum of 1.5 percent, preferably 2 percent.
- Consider spectator areas when grading the play field sidelines. Provide adequate level areas for spectator seating.
- Provide for a not-to-exceed 2 percent cross slope on walkways, unless it can be demonstrated that compliance to the 2 percent cross slope negatively impacts the usability of the park.
- Longitudinal slopes on walks may vary when necessary given the site-specific terrain. Do not exceed 20:1 (5 percent) without providing handrails per the Americans with Disabilities Act (ADA) regulations and the California Title 24 Building Code.

- Ensure compliance with the ADA and California Title 24 Building Code (Title 24) and minimize the need for handrails whenever possible.
- Hard court surfaces shall be graded at 1 percent.
- Grade the park site to provide topographic relief, including berms in some of the park site are desirable.
- Park site should be designed to balance (cut and fill)

Drainage and Sewer

- Provide a play area catch basin (per city standard) within each play area and slope the play area subgrade at 1 percent minimum toward play area catch basin.
- Do not locate drain inlets or cleanouts within or immediately adjacent to playing fields.
- Do not use drop inlets smaller than sixteen inches (16") square or diameter for landscape areas and twenty-four inches (24") minimum for all other areas. Drop inlets shall be concrete.
- Refer to Parks Standard Construction Details and Standard Specifications for Public Works Construction. Ensure the plan reference is to the most recent edition.
- For swales in planted or turf area, ensure a minimum flowline slope of 2 percent
- For storm drain stubs or sewers to future phase of work, install a white painted 4 x 4 post to a height of 2 feet (2') above ground with "SD Stub" written on post as applicable.
- Do not drain planted areas or turf areas across a paved area or walkway.

Paving

Concrete

- Standard walkway finish shall be medium broom finish perpendicular to the walkway edge, unless identified as a special paving area.
- Provide at least one path of travel within the park design to all major use areas where the concrete pathway is ten feet (10') wide preferred (8' minimum) for use by maintenance and service vehicles. All curves within this route shall contain curves no smaller than ten feet (10') in radius.
- Secondary walkways shall be six feet (6') wide, except where the walkway is not a circulation route and only surrounds the play area, which may be four feet (4') wide.
- Concrete mowstrips, and concrete collars around light fixtures in turf areas shall be nine inches (9") wide minimum unless otherwise accepted.
- Concrete walkways and other standard flatwork applications with fiber mesh, shall be installed at a thickness of three and a half inches (3-1/2"). Do not include welded wire mesh or rebar, unless otherwise required.
- Aggregate Base shall be installed on case by case basis as necessary.

- Thickened edges and 4" Aggregate Base shall be included only on walkways to be used by maintenance and service vehicles.

Concrete Mowstrip

- Concrete mowstrips 9" in width shall be constructed between all shrub/groundcover areas, and turf areas, or along the base of all fencing and turf areas.
- Concrete mowstrip 9" wide shall be constructed between the edge of decomposed granite paving and turf areas.
- Concrete mowstrips 12" wide shall be constructed along all vertical elements such as light posts and utility equipment.

Bike Trails

- Bike trails shall be twelve feet (12') wide with one two foot (2') wide decomposed granite shoulder and concrete mow strip on each side of bike trail or one three foot (3') wide decomposed granite shoulder on one side of the path (for joggers/pedestrians) as per LAS Park Standards. A lesser width on a bike trail may be approved by the Project Manager on a case by case basis.
- Other AC paving (including parking lots) shall be per Public Works' Construction Standards.

Decomposed Granite (DG) Paving

- Do not install DG in areas that exceed a longitudinal slope greater than 3 percent.
- Provide a minimum cross slope of 1 percent, not-to-exceed 2 percent.
- Include a 9" concrete mowstrip on the outside edges of a decomposed granite jogging trail when located within a developed park.
- Required edging on open space trails shall be determined on a case by case basis.

Redwood Header

- No redwood header shall be used within a developed park.
- Required edging on open space trails shall be determined on a case by case basis.

Fencing

- Refer to Standard Specifications for Public Works' Construction, latest edition.

Other Improvements

Site Furniture

- Do not specify wood furniture, except when specifically requested by the project manager or to match existing site furniture.
- Use only in-ground mounted site furniture, except with prior approval.
- Colors to be approved by the City. Select furniture, which provides compatible colors with the play components and other site features.
- Provide a two-foot (2') clearance between hardscape edges and site furnishings.

Benches and Picnic Tables

- Use only 8' benches and picnic tables to accommodate eight (8) people minimum wherever possible.
- Provide a minimum of one table, per ADA and Title 24 Standards, on an accessible surface path to ensure use by those in wheel chairs. Ensure that at least one side of the table is open with four-foot (4') clearance between picnic tables or other obstructions.
- Provide tables and benches at various locations around the park site such as: at the park entry, at regular intervals along the main circulation path, along the park perimeter away from the street, alone and grouped to support conversation and gathering, for viewing activities or pleasant views, and for direct supervision of children.
- Place benches at specific facilities (play areas, tennis courts, etc)
- Place benches with back toward a wall, plantings or trees to increase a sense of security.
- Set benches back from circulation paths so that pedestrians do not disturb bench sitters.
- Benches shall be placed to maximize shade in the summer and sun in the winter.

Bike Rack

- Bike Racks shall be provided near park and building entries where appropriate to allow bicycles to be parked and locked, or as directed by Project Manager.

Drinking Fountain

- Drinking fountain shall be accessible and have a side jug filler. Use Murdock M43-2, color shall be bronze only.
- Place drinking fountain to be conveniently located near children's play area, group picnic areas, restroom and sports facilities.

Barbecue Grills

- Group grills shall be a Deluxe Pedestal Grill with side utility shelf by Iron Mountain Forge, model 220-X.
- Individual grill shall be pedestal grill with side utility shelf by Iron Mountain Forge 205-X, in-ground mounted.

Trash Receptacles

- Trash Receptacle shall placed near all benches and tables, and at play areas and sports facilities and all high use areas.
- Trash receptacles shall match site furniture.

Shade Structure

- Small group picnic areas shall accommodate 25 to 50 people and large group picnic areas shall accommodate 50 to 100 people.

Other Site Features

- Decorative boulders shall be placed only in planters, decomposed granite areas, along planter edges or in play area curbs and in play areas as appropriate.

Play Areas

Size and Type:

- Tot Lot shall be 3,500 S.F. min. with a small sand area if space allows. Tot Lot shall be designed for 2-5 year olds and have a maximum deck height of 48".
- Adventure Area shall be 5,000 S.F. min. Adventure Areas shall be design for 5-12 year olds and have deck heights beginning at 48" and rise to 72" or higher.
- Combination Play Areas shall be 5,000 S.F. min.; Combination Play Areas shall be designed for 2-12 year olds. Design one half of play structure to accommodate 2-5 year olds, and the other half for 5-12 year olds.

Play Area Design:

- Provide 2" (two inch) clearance between the finished surface of the engineered wood fiber or playground sand and the top of adjacent play area curb.
- Include play area signage at the entry to each play area, the text shall include the following: "Accessible Playground", and "2-5 Year Olds", "5-12 Year Olds", or "2-12 Year Olds", and accessible access symbol and "Adult Supervision is Recommended" These signs shall be custom made, of permalene, colors are a tan sign with blue letters and symbol, by Landscape Structures, the size is 13-3/4" high by 10" wide mounted on a 3' high metal powder-coated post available through Landscape Structures Play Equipment.
- Orient the transfer deck to relate directly to the accessible play area entry. Provide a play area access ramp in compliance with ADA regulations, Consumer Product Safety Commission (CPSC) Guidelines, and ASTM. Refer to Park Standard Details
- Orient the swing area away from the active play area to avoid conflicts in play circulation. Swings can be either visually or physically separated from the active play area.
- Provide an additional two feet (2') between the required fall zone of a play component and the play area containment edge.
- Do not overlap fall zones, except between spring animals and other ground level events in compliance with accepted standards and requirements.
- Do not include rubber tiles in the play design.
- Sand for play areas shall be No. 2 fine white sand as produced by Patterson Sand and Gravel, Sheridan, California or equal.
- The City shall approve colors of the play components.
- Provide a shaded grouped seating area and individual benches for direct supervision of children in play areas.
- Provide a play area access ramp into the play area; refer to the Park Standard Details.

Play Equipment Design Criteria:

- Playground equipment and design shall meet current U.S, Consumer Product Safety Commission (CPSC) guidelines and standards as set forth in the Handbook for Public Playground Safety, as intended by SB 2733; and shall meet or exceed ASTM standards.
- Playground design shall comply with the latest requirements of the Americans with Disabilities Act (ADA) for public agencies, which include accessible elevated and ground level events.
- Use play equipment from City's approved vendors only: Landscape Structures, Little Tikes or Miracle Playground Equipment. except as otherwise approved.
- Playground equipment components shall be constructed primarily of metal (5" posts, decks, rails, climbers) and plastic (slides, and panels)
- Design shall consider durability and the long-term maintenance requirements of the specific equipment, as well as the potential occurrence of vandalism and graffiti. (Proposed play equipment is expected to be in place for twenty years.)
- No wood play equipment
- High maintenance and vandal prone items such as bubble panels, Lexan panels, tic-tac-toe panels, enclosed slides and cubes, and rotationally molded climbers shall not be used.
- Playground equipment design shall be flexible to allow for changes in the design as requested by the City.
- The design and equipment shall include a variety of play elements and shall have a high overall play value.
- The City LAS encourages unique / innovative design and / or play equipment.
- Play equipment shall meet the developmental needs of the users.
- Play Area theme shall be used when possible.

Adventure Area Components Desired:

- Slides: three or more with one being a Spiral Slide, one being a Slidewinder, and one slide of choice.
- Banister Rails or Ribbon Slide.
- Overhead events: two or more such as a Horizontal Ladder, and Rings
- Bridge: one or more such as clatterbridge or arch bridge
- Climbers: two or more metal climbers, such as arching, or vertical, etc.
- Turning bar, and/or chinning bar.
- Arch Swings: one or two 2-place Swings with belt seats.
- Tire Swings if space and budget allows.
- Roofs
- Do not duplicate the same play components from the tot lot if possible.

Tot Lot Play Components Desired

- Slides: two or more slides with one being a Double Slide or side by side slide.
- Wire Crawl Tunnel or Bridge: one type

- Activity Panels: several different types such as a music panel, steering panel, or storefront panel.
- Arch Tot Swings: one or more 2-place Arch Tot Swings with full bucket seats (no half buckets)
- Spring Riders: two spring riders, one with 2-seats.
- Do not duplicate the same play components from the adventure area if possible.

Irrigation

- Contact the Department of Utilities for selected/accepted backflow prevention device and/or refer to the Public Works Construction Standards.

Meter

- The meter installation shall be a part of the construction contract. Meters can be purchased through the City Department of Utilities.
- The water connection (if not previously provided) shall be by Department of Utilities. Fees for such connection shall be paid by the Contractor as part of the project. The City Department of Utilities shall perform the actual water tap.

Backflow Preventers (BFP)

- Size BFP the same size as the meter.
- Department of Utilities shall determine type.
- Provide a lockable and removable insulation cover.

Flow Meter

- Install one (1) flow meter for each mainline point of connection. Exceptions will be considered by LAS when justified and appropriate.
- When flow meter is installed above grade, a lockable backflow prevention device enclosure shall be installed.

Controller

- Installer shall be a Rainmaster Central Control System per city requirements.

Piping

- Do not pipe full and part turf rotor heads on the same valve or turf rotor heads with spray heads on the same valve.
- Sleeve all wiring and waterlines under paving and supply a spare three inch (3"Ø line capped at both ends. Pipe sprinkler heads following grade contours.
- Do not install mainlines smaller than four inches (4"). Offshoots from the mainline for small landscaped areas may be smaller.
- Do not place irrigation main lines in a sports field or future paved areas.

Automatic Control Valves, Sprinkler Heads and Quick Couplers

- The total number of turf heads per valve and GPM flow rate shall not exceed 75 percent maximum flow rate of the backflow device as measured on the downstream side of the backflow.
- All valves shall be Rainbird with ball valves on the inlet side or equal.

- Provide a maximum turf head rotor head spacing of 45'.
- Large turf rotor heads shall be Hunter I-40 or Hunter I-25, with stainless steel riser, unless otherwise accepted.
- Small turf heads may be Hunter PGM series or Rainbird 1800 series.
- Spray heads and bubblers for planter areas may be Rainbird 1800 series or other, as accepted by the Department of Parks and Recreation.
- Irrigation heads shall be laid out in a triangular pattern.
- Do not place irrigation valves in a sports field or future paved areas.
- Install lawn irrigation valves at 6" below grade with 3M marker fastened to underside of valve box cover.
- Install shrub/groundcover irrigation valves at grade in a locking valve box placed in the shrub/groundcover area.
- Place 1-1/2" quick coupling valves adjacent to large paved areas, at 150' along the irrigation main line and at the end of main line runs.

Other

- Comply with the City's Water Conservation Ordinance
- Provide a complete water table outlining water needs per valve by month for a twelve-month period. The water table shall be included in the project manual as a part of the specifications (appendix) or on the plans.
- All Consultants shall utilize the attached irrigation legend for standardization of symbols for commonly used equipment.
- Do not irrigate within existing Oak tree canopy.

Baseball/softball infield irrigation

- Place five (5) turf rotors around the perimeter of the infield. Set heads a minimum of four inches (4") and a maximum of six inches (6") into the turf area from the infield edge.
- Set infield rotors a minimum of four inches (4") and a maximum of six inches (6") away from backboards or hardscape.
- Install a minimum of four (4) rotors on all dirt infields, (one behind pitcher's mound, one half-way between home and first base, one behind second base and one half-way between homeplate and third base along the backstop/fence edge, four to six inches (4"-6") into the infield. Use Hunter I-42 heads.
- Install a brass manual irrigation valve to turn on the infield line.

Irrigation System Booster Pump

- Berkeley 'B' series pump, 3450 rpm, 3-phase, 230-volt, ODP motor. Pump shall be cast iron bronze fitted. Motor and pump sizing to meet conditions.
- Safetronics Rapidpak VFD, PID Loop, 230-volt circuit breaker, control transformer, through door operator, and cooling fan.
- Efector PA3224 transducer 4-20 MA output, SS with shielded cable.
- Setra 204970 power supply.
- Efector ST3653 flow switch for 110 volt and SS probe with adjustable set point or connect to pump start terminal in irrigation controller.
- Barksdale ML1H-203 temperature switch to turn off for no flow.

- No-shock liquid filled gauges: 100 psi, size 2”.
- Nibco GD4765-? Butterfly valve with grooved connection.
- Galvanized pump shall be plumbed with steel threaded pipe and fittings.
- Drop pipes with MJ connectors to system plumbing.
- Booster pump assembly shall be mounted on a concrete pad.
- Booster pump enclosure sized to fit, two-piece, with control panel access, slanted roof, louvered sides, and notched top for ventilation, all steel brackets and hardware, Forrest green color.
- Space for future master valve and flow meter installation downstream of pump assembly required.
- 90 day maintenance period to cover system adjustment for optimum performance.
- One-year warranty on all equipment required. (minimum)
- Warranty period begins at final acceptance by the City.
- Contractor to provide City with operating manuals and special tools for equipment.
- Contractor to provide as-built drawings.

Planting

- Where space allows, provide tree grouping in groves rather than in singles or rows in equal intervals, unless the design dictates otherwise.
- Provide a twelve-foot (12’) clearance between the tree trunk and the edge of hardscape.
- Provide a twenty-foot (20’) minimum clearance between trees, or between trees and other vertical site improvements in turfed areas unless project manager approves a differing width.
- Provide an entry planted (non-turf) area to locate the park name sign. Provide low maintenance flowering trees, shrubs and perennials to accent the sign.
- Use appropriate list for preferred trees according to planting area:
 - Sacramento Urban Forest Management Plan (Generic Tree Plantings);
 - Sacramento Shade Tree Ordinance (Parking Lots Trees);
 - Tree Services Planting List (Street Trees)

Selected trees shall be approved by the project manager and shall fulfill the following criteria:

- Be appropriate to the site specific environment;
- Tolerate heavy soil conditions;
- Tolerate freeze;
- No heavy litter or lengthy dropping of leaves, fruit or debris
- Be disease and pest resistant;
- Have a deep rooting system (not shallow rooted); and
- Tolerate heat (is not susceptible to sunburn).
- Tree species, which are known for shallow root systems, may be considered acceptable if located within a planter area and/or planted with root barrier panels.

- When providing tree cutouts within hardscape areas, provide a minimum five-foot (5') diameter round or square cutout. When budgets allow, include tree grates or decomposed granite paving.
- Planting sizes shall be:
 - 15 gallon for trees, unless otherwise specified;
 - 5 gallon for major shrubs;
 - 1 gallon for minor shrubs, vines and groundcovers; and
 - liners for fast growing groundcovers

Size variations shall be approved by the City Project Manager
- Trees shall be planted no closer than 18' to any light fixture or vertical structure.
- Plant trees to buffer the street frontage, to organize and define use areas on the park site, to provide protection from wind and sun, and as a visual amenity to the park.
- Plant flowering trees at all park entries where possible and appropriate.
- Do not plant summer flowering trees next to the picnic areas or play area, to reduce insect problems.
- In planted areas along streets, parking lots and tree cutouts in pavement, provide for "Deep Root" panels along the pavement edge.
- Use low water use trees, shrubs and groundcover where possible and appropriate.
- Appropriate use of natives will be encouraged in park design in order to reduce maintenance, and add interest to park landscapes.
- Twenty percent (20%) of all trees planted in the park shall be California native species such as (Blue Oak, Valley Oak, Coast Live Oak, California Sycamore, etc.) to follow City Council direction.
- Provide a naturalized area of low maintenance groundcover or native grasses and trees in Community Park wherever possible and appropriate.
- Establish a sight triangle at the park intersection or park entry to maximize safety and visibility.
- Obtain soils fertility test and report as required in the project specifications.
- Selection and placement of trees within park land shall be reviewed and approved by the project manager or Landscape Architecture Section.

Post and Cable Fencing

- Refer to the Park Standard Details.

Restrooms and Outdoor Sinks

- Fixtures shall be stainless steel.
- Use heavy-duty fixtures only; i.e. Chicago or accepted equal.
- Use polished concrete sealed with two (2) coats of anti-graffiti stain.
- Do not use tile or brick (on outdoor sinks).
- Install at least one (1) outdoor GFI quadruple outlet with a heavy-duty, weather-resistant, vandal-proof, lockable cover.

- Sewer connections shall be installed similarly to that described for the water connection.

Pre-Fabricated and/or Proprietary Structures

- Consult with the Building Department for requirements for structural calculations. Some items may be accepted as deferred submittal. Determination shall be included in the 90 percent completion submittal to the City.
- Include a note on the plans, if deferred items are a part of the project, “No additional time will be granted to the Contractor for Building review and approval of deferred item(s).”

Site Electrical

- Provide security pathway lighting throughout the park as required on the project’s construction documents.
- Provide lights outside a restroom or building entrance for security.
- Locate an outdoor GFI dual outlet with a lockable, weatherproof, vandal-resistant cover in all group picnic areas.
- Provide for one station on the Rainmaster Central Control System for security lighting.
- Provide telephone access for the Rainmaster Central Control System.
- The Electrical Division shall approve metered service panels and service points. Where questions arise regarding acceptable standards, contact the City’s Electrical Division directly.

Attachments

- **Park Category Descriptions**
- **Recreation Facility Development Standards**
- **Irrigation Symbol Legend**