



# **Maintainable Park Design Guidelines**

**City of Sacramento**  
**Department of Parks and Recreation**  
**Park Planning, Design and Development**  
Revised June 2006

These Maintainable Park Guidelines were developed with the intent to design parks, with reduced maintenance requirements, and improved water efficiency and energy conservation that parks previously design. The guidelines are to be used when designing all new park, bikeway and open space development projects. Also, the guideline will be used where possible and appropriate in renovation projects.

## **I. PARK DESIGN**

### **General**

- ❑ All master plans for new park development shall be subject to a master plan approval process that requires review by the Parks and Recreation Commission and final approval by the City Council.
- ❑ 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.
- ❑ Park design shall allow for large contiguous recreational turf areas.
- ❑ 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.
- ❑ 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.
- ❑ Concession or public/private enterprise opportunities shall be included in existing and future community and regional park plans as appropriate.
- ❑ 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.
- ❑ 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.
- ❑ Adequate parking shall be provided at each community and Regional Park location to minimize parking problems on residential and arterial streets.

- ❑ Provide adequate access for fire, emergency and maintenance equipment in parks, trails, and open space.
- ❑ 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 earth forms.

### **Recreation Amenities:**

- ❑ 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.
- ❑ Sports courts shall be oriented with the long axis north south.
- ❑ Provide for the optimum orientation of sports fields.
- ❑ Baseball fields shall have consideration for spectator seating in bleachers or lawn areas behind the overthrow fences.
- ❑ *Score master* soccer goals shall be installed in soccer fields.
- ❑ Dog Parks shall be designed with the following: a large concrete area at the entry and drinking fountain area; a drinking fountain with jug filler and drain; a large decomposed granite paving area in addition to turf area; no turf mounds; a 6' high fence enclosing the dog park; a fenced entry vestibule; and a Parks standard dog waste bag dispenser with signage.

## **II. GRADING**

- ❑ Do not grade turf 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 slopes 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)

## **III. DRAINAGE**

- ❑ 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.
- ❑ For swales in planted or turf area, ensure a minimum flow line 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.
- ❑ Refer to Parks Standard Construction Details and Standard Specifications for Public Works Construction. Ensure the plan reference is to the most recent edition.

## **IV. HARDSCAPE**

### **General**

- ❑ Provide a ten-foot (10') wide main concrete walkway through the park to all major use areas including the picnic area, playground, sport fields and sport courts for use by park maintenance and service vehicles. Provide a driveway cut at the entrance and exit of the walkway and a turn around if required to maneuver.
- ❑ All curves and sidewalk intersections within the park shall contain curves no smaller than a ten feet (10') 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 walkway or decomposed granite path shall be use as the separator between a turf area and a native grass area. If this is not practical then a recycled plastic header may be used to define the turf area from the native grass areas.

### **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.
- ❑ 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.
- ❑ Develop a signage system on trails, which provides users with trail information, such as safety regulations, interpretative opportunities and distance.

### **Concrete**

- ❑ Standard walkway finish shall be medium broom finish perpendicular to the walkway edge, unless identified as a special paving area.
- ❑ 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, or as the soil testing recommends.
- ❑ Thickened edges and 4" Aggregate Base shall be included only on walkways to be used by maintenance and service vehicles.

### **Decomposed Granite (DG) Paving**

- ❑ Decomposed granite paving shall be installed in all separated sidewalk areas or narrow planting strips less than 10' wide.
- ❑ Decomposed granite paving areas should be graded a 2% min., and large decomposed granite areas shall have an area drain.
- ❑ Do not install DG in areas that exceed a longitudinal slope greater than 3 percent.
- ❑ Provide a minimum cross slope of 2 percent.
- ❑ Include a 9" concrete mow strip 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

### **Edging**

- ❑ Concrete mow strips 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 mow strip 9" wide shall be constructed between the edge of decomposed granite paving and turf areas.
- ❑ Concrete mow strips 12" wide shall be constructed along all vertical elements such as light posts and utility equipment.
- ❑ No redwood header shall be used within a developed park.
- ❑ Trex header shall be used instead of redwood or recycled plastic header in all applications (header board, baseball backstops, overthrow fences base boards, etc.)
- ❑ Required edging on open space trails shall be determined on a case-by-case basis.

## **V. SITE AMENITIES**

### **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.

### **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.

## **Play Areas**

- 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.
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- 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.
- Site play areas near the main circulation route and near group picnic areas and open lawn areas.
- Play equipment shall be selected from the following three Parks approved play equipment companies: Landscape Structure, Little Tike and Miracle. Equipment deviations may be considered on a case-by-case basis.
- 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 age –appropriate 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 "Adult Supervision is Recommended". These signs shall be made of permalene, colors are a tan sign with blue letters, mounted on a 3' high metal powder-coated posts. Signs are 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. Rubber mats shall be installed under all swings and tire swings.
- 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.
- ❑ 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

#### **Restrooms**

- ❑ Restroom facilities shall be provided in all community and regional parks and in heavily used neighborhood parks.

- ❑ 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.
- ❑ Restrooms shall be designed with the following: stainless steel doors and fixtures, adequate ventilations, masonry walls, sheet steel roof, and sealed concrete floor with area drain.

### **Shade Structure/Picnic Areas**

- ❑ Small group picnic areas shall accommodate 25 to 50 people and large group picnic areas shall accommodate 50 to 100 people.
- ❑ Consult with the Building Department for requirements for structural calculations.
- ❑ Large Group picnic areas shall be Class I picnic areas and shall include ten tables with a serving table and two large group grills.

### **Tables and Benches**

- ❑ Tables and benches shall be eight feet (8') wide. Tables, and benches shall be made of plastic-coated metal or powder-coated metal in all new projects. Do not specify wood or recycled plastic site furniture, except to match existing. Replacement benches and tables shall match existing site furniture, if this is not feasible please consult with Landscape Architect before replacements.
- ❑ Picnic areas shall provide for ADA access and shall also be installed on a concrete flatwork, and not decomposed granite paving.
- ❑ 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.
- ❑ 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.

### **Trash Receptacles**

- ❑ Trash receptacles shall match site furniture.

- ❑ Trash receptacles and a matching recycling receptacle shall be placed side by side near all picnic areas, play areas, sports fields, and all other high use areas or at rest areas along bikeways and major walkways.
- ❑ Trash receptacles not placed along the main walkway/service route shall be placed no greater than a 30' from the street surrounding the park to the trash receptacle.
- ❑ Trash receptacle shall have a lid with larger diameter (14"+/-) opening and recycling receptacle shall have a lid with small diameter (8"+/-) opening and shall be labeled for recycling.
- ❑ Receptacles shall have a strong chain attaching the lid to the receptacle.

#### **Other**

- ❑ Decorative boulders shall be placed only in planters, decomposed granite areas, along planter edges or Tack-weld or peen surface-mounted bolts on all site furnishings, except on drinking fountains.
- ❑ Bollards to have a 2" maximum fold-down height refer to revised detail in play area curbs and in play areas as appropriate.

### **VI. FENCING**

- ❑ Refer to the Park Standard Details.
- ❑ Refer to Standard Specifications for Public Works' Construction, latest edition.

### **VII. IRRIGATION**

#### **General**

- ❑ Booster Pump, Central Irrigation Controllers and Electrical Service shall be grouped together in one location adjacent to the property fence, and shall be installed on a single concrete pad, see Standard Details for layout.
- ❑ Irrigation equipment and utility boxes shall be installed in a planter area, and shall be screened with plant material.
- ❑ Trees planted in native grass areas, mulch, tree wells or decomposed granite paving shall be irrigated by a two-bubbler systems.
- ❑ Comply with the City Water Conservation Ordinance.

#### **Backflow Preventers (BFP)**

- ❑ Size BFP the same size as the meter.
- ❑ Contact the Department of Utilities for selected/accepted backflow prevention device and/or refer to the Public Works Construction Standards.
- ❑ Provide a lockable and removable insulation cover.

#### **Booster Pump Assembly**

- ❑ Booster Pump Assembly shall be installed in all parks and shall meet the Park Standard Specifications.
- ❑ 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 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.

### **Controller**

- ❑ Rainmaster Central Irrigation Controller shall be installed in all parks and shall meet the Park Standard Specifications.
- ❑ Battery and Solar Irrigation Controllers may be used for small landscape areas and planters less than one-half (½) acre were electrical service is not feasible. Solar shall be located in systems of four valves or less.

### **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.
- ❑ Moisture sensors and flow sensors shall be used in all park projects.

### **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.

### **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"0 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.
- ❑ Use schedule 80 pipe on all nipples and connectors.

### **Quick Couplers and Valves**

- ❑ 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.
- ❑ All valves shall be Rainbird with ball valves on the inlet side or equal.
- ❑ Install shrub/groundcover irrigation valves at grade in a locking valve box placed in the shrub/groundcover area. Irrigation main lines or irrigation valves shall not be placed in sport fields or future paved areas.
- ❑ Valve boxes shall be at grade in planters, and one-half (½) inch below grade in turf and native areas.
- ❑ Irrigation valves shall be designed per function (i.e.: soccer field turf isolated separately from picnic area turf).

### **Sprinkler Heads**

- ❑ 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.
- ❑ Provide a maximum turf head rotor head spacing of 45'.
- ❑ Rotary sprinkler heads shall have a stainless steel riser.
- ❑ 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.

### **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 home plate 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.

### **Other**

- ❑ 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. Provide a complete watering schedule, outlining water needs per valve by month for a twelve-month period. Watering schedule shall be included on the project construction plans.
- ❑ Do not irrigate within existing Oak tree canopy.

## **VIII. PLANTING**

### **Design**

- ❑ New community or regional parks shall have 20% of site in low maintenance naturalized areas with either 4" layer of mulch, non-irrigated native grass, irrigated no-mow tall fescue, decomposed granite paving areas or low-maintenance groundcover, all planted with native tree groves wherever possible and appropriate to limit mowing and irrigation. Design deviations may be considered on a case-by-case basis.
- ❑ New neighborhood parks shall include a low maintenance naturalized area as described above where possible and appropriate.
- ❑ Existing parks shall be redesigned to reduce or eliminate non-recreational turf areas outside of active sports fields or picnic areas in parks and replaced with either 4" layer of mulch, non-irrigated native grass, irrigated no-mow tall fescue, decomposed granite paving areas or low-maintenance groundcover, all planted with native tree groves wherever possible and appropriate to limit mowing and irrigation.
- ❑ Naturalized areas shall be designed to include passive recreation such as: picnicking, nature trails with interpretive signage, bikeways, rest areas, horseshoe courts or similar activities.
- ❑ Promote the use of drought tolerant and native plant material where appropriate in parks.
- ❑ Parkways, open-space and bikeways should be designed with the majority of the site in non-irrigated native grasses and trees, or mulch and trees and limited planter areas at entry points. Turf shall be limited to no more than 10% of site and planted to enhance active-use gathering areas, picnic areas, or to providing a recreational turf area. Design deviations may be considered on a case-by-case basis.
- ❑ Natural landscape features are desirable in park designs, which include tree grooves, natural plantings, water features, dry streambeds, rock features, and earth forms to enhance the natural character of the site.
- ❑ Plants and trees shall be planted in mass groupings of similar plant types.
- ❑ Plant material (trees, shrubs and groundcover) shall be low maintenance and drought-tolerant or native species.
- ❑ At playgrounds, trees shall be planted in planters, tree wells, mulch area or decomposed granite paving immediately to the south and west side of a playground in sufficient quantity to shade 50% of the playground and sand area when the trees grow to full maturity.

### **Planters**

- ❑ Planter areas shall be limited to park entry points, focal points, gathering areas, and to screen irrigation equipment and utility boxes.
- ❑ Planter areas shall be planted with low maintenance, low water using, dwarf, naturally compact, and hardy perennials, shrubs and low-growing groundcover that require no routine pruning or dead heading. Shrubs planted next to property line fences shall be selected from species that naturally grow less than six feet (6') high and shrubs planted elsewhere in the park shall grow less than four feet (4') high.

- ❑ 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.
- ❑ In planted areas along streets, parking lots and tree cutouts in pavement, provide for “Deep Root” panels along the pavement edge. Appropriate use of natives will be encouraged in park design in order to reduce maintenance, and add interest to park landscapes.

### **Trees**

- ❑ Trees planted in turf areas shall be a minimum of twenty-foot (20') apart, or between trees and other vertical site improvements.
- ❑ Trees planted in turf areas next to the street shall be set back fifteen feet (15') from the front of the curb face.
- ❑ Trees planted in native grass area, no-mow fescue areas, mulch, decomposed granite or planters shall be planted a minimum of twelve-foot (12') apart.
- ❑ Trees planted in naturalized areas shall be drought-tolerant species and native to the Sacramento Valley region only, and shall be planted to form dense tree grooves.
- ❑ 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.
- ❑ Trees shall be planted at a minimum of 25 trees per acre in parks and a minimum of 40 trees per acre in naturalized or bark mulch areas.
- ❑ Trees with excessive fruit, branch or litter drop such as: Purple-leaf plum, Liquidambar, and Chinese Elm shall be avoided in parks.
- ❑ 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);
- ❑ Selected trees shall be appropriate to the site specific environ shall be approved by the project manager and shall fulfill the following criteria:
  - 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.
- ❑ 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.
- ❑ Selection and placement of trees within parkland shall be reviewed and approved by the project manager or Landscape Architecture Section.
- ❑ Establish a sight triangle at the park corners or park entry to maximize visibility from the street.

### **Turf**

- ❑ Turf areas shall be graded no steeper than 5:1, as it cannot be easily mowed.
- ❑ Turf types shall be selected that require less mowing and water.

### **Other**

- ❑ 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
- ❑ Obtain soils fertility test and report as required in the project specifications.
- ❑ 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.
- ❑ Weed fabric shall be placed under bark mulch on a case-by-case basis.

## **IX. UTILITIES**

- ❑ Provide security pathway lighting throughout the park to existing streetlights along the park sidewalks.
- ❑ Provide lights outside a restroom or building entrance for security.
- ❑ Provide for one station on the Rainmaster Central Control System for each of the following: park pathway lighting, sports field lighting, tennis court lighting, etc.
- ❑ Tennis court lights shall have a 1-hour push button operation with a 5 minute warning system to allow tennis players to reactivate the tennis lights for one additional hour prior to shut-off of the lights. Provide telephone access for the Rainmaster Central Control System. Locate an outdoor GFI dual outlet with a lockable, weatherproof, vandal-resistant cover in all group picnic areas.
- ❑ The Electrical Division shall approve metered service panels and service points. Where questions arise regarding acceptable standards, contact the City's Electrical Division directly.

## **X. ATTACHMENTS**

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