



Parks, Recreation & Libraries Department

Section 1: DESIGN GUIDELINES

City Departmental Key Contacts

Department	Phone Number (916)
Parks & Recreation, Park Development	772-PLAY (7529)
Development Services, Building Division (Structural)	774-5332
Electric	797-6937
Inspection Line (Structural, Plumbing & Electrical)	774-5332
Development Services, Engineering Division (Right-of-way Improvements & SWPPP)	746-1300
Environmental Utilities	774-5770
Planning	774-5276
Permit Center	Open to public: M-F 8 a.m. - 4 p.m. at 311 Vernon Street

Roseville Parks, Recreation & Libraries Values

Parks, Recreation & Libraries Mission

To enhance lives and the community by providing exceptional experiences.

Parks, Recreation & Libraries Vision

To be the leader in creating a healthy community through progressive, sustainable & memorable experiences.

Parks, Recreation & Libraries Values

- Fun & Celebration
- Innovation
- Learning
- Creativity
- Health & Wellness
- Community
- People
- Stewardship
- Safety
- Inclusion
- Diversity
- Collaboration

Values in Our Partners (Consultants, Contractors, Developers, Others)

- Responsiveness
- Creative and Innovative
- Team Work
- Fiscally Responsible
- Timeliness
- Human Design Bias
- Place-making orientation
- Learners-Teachers
- High Tech-High Touch
- Honesty and Ethics

The focus in all projects should be creating areas for social interaction for people oriented experiences/outcomes. Each space should offer, at minimum, an opportunity to learn and grow, interact and be social through a variety of positive active/programmed and passive/self-directed activities, which are aesthetically pleasing and are safe, clean and green.



Parks, Recreation & Libraries Department

**Section 1A:
DESIGN PRELIMINARIES**

Design Guidelines and Preferred Materials Checklist

These guidelines do not replace adopted Specific Plan Design Guidelines for landscape medians and street frontages. These Specific Plan Design Guidelines also contain conceptual guidance for improved park amenities. For all master plans, the proposed design shall include elements outlined in the adopted Specific Plan to the extent possible.

Grading

- ❑ Do not grade turfed slopes greater than 4:1 (25%) as it cannot be easily mowed. If possible, provide a 60" minimum flat bench at top of slope.
- ❑ Crown playing fields such as baseball, softball, and soccer, at a minimum of 1.5%, preferably 2%.
- ❑ Consider spectator areas when grading the play field sidelines. Provide adequate level areas for spectator seating.
- ❑ Provide for a not-to-exceed 2% cross slope on walkways, unless it can be demonstrated that compliance of the 2% 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%) without providing handrails per the ADA regulations and the California Title 24 Building Code.
- ❑ Ensure compliance with Americans with Disabilities Act of 1990 (ADA), California Title 24 Building Code (Title 24) and minimize the need for handrails whenever possible.
- ❑ Hard court surfaces shall be graded at 1%.
- ❑ Obtain the current standard notes for grading from the Development Services Engineering Division. These can be found online.
- ❑ Comply with the City of Roseville Oak Tree Ordinance.
- ❑ Slopes greater than 3:1 are not permitted. If unavoidable circumstances arise during construction, a solution for future erosion of bark and soils must be provided for all slopes greater than 3:1. A drainage plan showing a constructed drainage solution must be provided. An example is to place drain inlets at point discharges and a swale two feet from back of walk. Approval of the proposed drainage solution must be obtained from the Parks and Recreation Department prior to installation.

Drainage

- ❑ Confirm and indicate depth of storm drain stub.
- ❑ Locate all clean-outs **OUTSIDE** of the play area, within planting or turf.
- ❑ Provide a combination system using a main drain inlet and a perforated pipe (in a drain rock filled trench) drainage system to capture long runs or isolated areas within the play area. Slope subgrade to drain inlets.
- ❑ Do not locate drains within or immediately adjacent to a play field.
- ❑ 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 Public Works Design and Construction Standards. Ensure the plan reference is to the most recent edition.
- ❑ For swales in planted or turf areas, ensure a minimum slope of 2%. Avoid swales in turf whenever possible.
- ❑ Do not sheet drain from planted or landscape areas across hardscape.

- ❑ Manholes shall be per the Development Services Design and Construction Standards.
- ❑ For storm drain stubs to future phases of work, cap or install a riser above the silt line.
- ❑ Do not place drains within the Oak tree canopy.

Chain Link Fencing

- ❑ Where fencing is related to a specific facility, i.e. tennis courts, etc., install black vinyl coated fabric, posts and fittings, whenever budget allows.

Site Furniture

- ❑ Do not specify wood furniture.
- ❑ Use only in-ground mounted site furniture, except drinking fountains and trash receptacles, unless otherwise approved by project manager.
- ❑ All site features, including planter and sound walls shall be sealed with two coats of anti-graffiti sealant in compliance with the Development Services Design and Construction Standards. Site furniture, i.e. benches, picnic tables, etc. shall be coated with anti-graffiti finishes.
- ❑ Planters, seat walls and retaining walls shall be designed to prevent skateboarding. This shall be an integral part of the overall design. Third party “add-ons” shall be prohibited.
- ❑ Colors “to be selected by the City”. Select furniture that provides compatible colors with the play components.
- ❑ Provide a two-foot (2') clearance between hardscape edges and site furnishings.
- ❑ Provide a minimum four-foot (4') clearance between picnic tables or other obstructions on a minimum of one side for each table.

Preferred Materials List

(While materials and equipment are listed as preferred, it shall be understood to include "or accepted equal" as stipulated in the standard specifications.)

Description	Model #	Manufacturer	Distributor	Comments
Backstops (Permanent)				Obtain preferred configuration from project manager
Backstops (Portable)	1204-12	Patterson Williams	Miracle Play Group (916) 317-0545	or accepted equal.
Ball Field Mix	60/40 red lava and clay loam		Cascade Rock 916-383-1300	or accepted equal.
Barbecue Pits	#200-X	Iron Mountain Forge	All About Play (800) 788-8855	Heavy duty, black or accepted equal.
Basketball Courts				Concrete with fiber mesh, except with prior approval.
Basketball Goals	1513-26-44 #29 backboard perimeter	Patterson Williams	Miracle Play Group (916) 317-0545	6' offset, #35 net and #44 goal, #26 1/4" rectangular heavy-duty solid steel, powder-coated backboard with #29 perimeter, lifetime warrantee. Dual post
		Tomark Sports	(800) 959-1844	
	TF7174 (rim) PP10172 (net) TFS172 (backboard) TF7175 (stand)	Wausau Tile	(800) 231-4836	6' offset, heavy-duty chain net, aluminum rectangular powder-coated backboard. Single pre-cast concrete post.
				or accepted equal.
Benches	'SG' Series Signature Series	Wabash Valley	Miracle Play Group (916) 317-0545	Perforated metal, PVC coated, in-ground mount or accepted equal. ***Due to current lead time issues, contact PM for accepted alternate manufacturers.***
Bike Racks	WBR-700	L.A. Steelcraft Products	Ross Recreation (916) 985-6349	7' loop (ribbon-style), 2-3/8" O.D Powder coated
	709	Miracle	Dale Green & Associates (916) 672-0112	Loop style, powder coated or accepted equal.
Bollard				shall be per detail PK-39.
Chain Link Fencing	Standard 9 gauge fabric	Per Standard detail PK-40		At play courts, all parts (i.e. posts, fabric, fittings) black vinyl coated, unless otherwise accepted.

Preferred Materials List

(While materials and equipment are listed as preferred, it shall be understood to include "or accepted equal" as stipulated in the standard specifications.)

Description	Model #	Manufacturer	Distributor	Comments
Booster Pump		V-Power Equipment, Inc.	(888) 830-8025	Sizes required by irrigation system or accepted equal.
Water Feature Controller		Water Odyssey		Sizes required by water play features or accepted equal.
Drinking Fountains	#10145 SM	Most Dependable Fountains	(800) 821-9838	Bottle filler, dual bowl and accessible Include recessed hose bib with locking cover, stainless steel control valves with o-rings, and external stainless steel surface mount carrier. Jug fillers to be added at field complexes with 2 or more fields. All drinking fountains to connect to sanitary sewer lines where feasible
Light Pole	RT34-16 DE BLK TXT 30-30	Whatley		16' nominal mounting height, round tapered, direct burial pole. Finish: Black
Lights (Security/ Pathway)				Whenever possible, match existing streetlights and use an LED fixture
Lights (Parking lot)		Verify fixture style with Project Manager		150 W HPS. 20' straight steel pole. Finish: Black
Park Identification Sign	City Standard PK-28	Quick Crete Products Norco, CA	(916) 447-8644	Concrete
		Outdoor Creations Inc.	(530) 365-6106	
Park Namesake		KVO Industries, Inc.	(707) 573-6868	Information provided by City.

Bio Sign				
Playground Rules Sign	City Standard PK - 24	Gopher Sign Company	(651) 698-5095	Or accepted equal

Preferred Materials List

(While materials and equipment are listed as preferred, it shall be understood to include "or accepted equal" as stipulated in the standard specifications.)

Description	Model #	Manufacturer	Distributor	Comments
Picnic Tables	'SG' series	Wabash Valley	Miracle Play Group (916) 317-0545	Perforated metal, PVC-coated, in-ground mount. Select 6' long tables with double legs and cross braces. Specified tables shall not have umbrella holes. ***Due to current lead time issues, contact PM for accepted alternate manufacturers.***
Garbage Cans				Due to recent changes in waste management regulation, contact project manager for preferred models.
Tennis Court Posts/Net	2205	Patterson Williams	Miracle Play Group (916) 317-0545	3" sq. posts, black vinyl coated, removable brass tension handle. Heavy duty net or accepted equal.
Volleyball Posts	2219-20	Patterson Williams	Miracle Play Group (916) 317-0545	4" O.D. posts, 11'-6" long w/fixed eyelets, self-securing rope clamp, 4" stainless steel cable option or accepted equal.
Volleyball Net	PBN4		Volleyballusa.com	
Volleyball Sand	#1 Masonry Sand	Hasties Capitol Sand & Gravel	(916) 989-4600	
Softball Bases and Pitching Rubber	10355	Enduro Bury-In Home Plate	Tomark Sports (800) 959-1844	1/field
	10390	Step-Down Pitching Rubber		2/field
	10053 and 10050	Saf-T-Slider Base with		1 set/field

		Double First Base		
	10225	Anchor Ground Stakes		8 total/field

Play Areas

- ❑ Provide a minimum of three inches (3") between the finish surface of engineered wood fiber or sand and the top of curb/wall/or other. Ensure the 3" is at compaction/settling.
- ❑ Include as a part of the design "Age Appropriate" stickers visibly displayed on the equipment indicating the age range of the user in which the designed play structure is intended.
- ❑ Include as a part of the design the location of a "Playground Rules" sign indicating expectations for playground behavior and supervision. See standard details for sign design.
- ❑ Orient the transfer deck to relate directly to the play area entry. Provide an access ramp in compliance with the latest ADA regulations, Consumer Product Safety Commission (CPSC) Guidelines, and American Standards, Testing and Materials (ASTM). Comply with all applicable laws.
- ❑ Separate the swing area from the active play area to avoid conflicts in play circulation. Separation should be physical.
- ❑ Provide an eight foot (8') distance use zone between the play component and the play area containment edge.
- ❑ Do not overlap use zones, unless accepted in applicable regulations/codes. Use zones shall remain in compliance with accepted standards and requirements.
- ❑ Do not include "Super Scoops" or similar type sand scoop play components.
- ❑ Do not include rubber tile in the play design.
- ❑ Site play area for safe play and easy viewing from the street or parking lot.
- ❑ Sand for play areas shall be #1 masonry sand as produced by Hasties Sand & Gravel, Roseville, California or equal.
- ❑ Colors of the play components "to be selected by the City".

Irrigation

- ❑ Confirm and indicate depth of water stubs.
- ❑ Recycled Water Systems: See City Environmental Utilities Department (EU).
- ❑ **Irrigation Pressure Calculations and Watering Schedules**
 - Pressure loss calculations must consider utilizing a minimum of two and up to 4 valves concurrently equaling the largest system demand.
 - Pressure loss calculations must consider the longest run and the largest demand based on gallons per minute.
 - Pressure loss calculations shall consider static water pressure at build-out.
 - Watering schedules should consider a finite watering of nine hours per day. The maintenance watering schedule should ensure that the entire system associated with each controller shall meet the nine hour window per day. Watering various areas within a system for seven days a week does not meet the nine hour per watering day criteria.
 - The goal of the irrigation system is to provide maximum flexibility to the system in cases where pressure losses are greater than originally estimated, new valves

- must be added to the system or other long term needs to ensure a healthy, thriving landscaped/turf area.
- ❑ Contact EU for selected/accepted backflow prevention device and/or refer to the Development Services Design and Construction Standards.
 - ❑ Comply to extent reasonable with the City's water conservation ordinance.
 - ❑ Meter
 - The meter shall be a part of the construction contract. Meters must be purchased through the City (EU).
 - The water connection (if not previously provided) shall be provided by EU. Fees for such connection shall be waived. The actual water tap shall be performed by the City (EU). Costs for installation shall be part of the contract.
 - ❑ Backflow Preventers (BFP)
 - The BFP can be installed by the contractor OR by the City. All costs of installation (no matter method) is the responsibility of the contractor.
 - Size BFP the same size as the meter.
 - Type shall be accepted by EU.
 - Provide a lockable and removable insulation cover.
 - ❑ Master Valve
 - For systems with one master valve, use a normally open master valve.
 - For systems with two master valves, the smaller master valve shall be normally open and the larger master valve shall be normally closed.
 - Install master valve in valve box below grade.
 - ❑ Flow Meters
 - Utilize preferred ultrasonic flow meter that can capture maximum flow and minimum flow for the system.
 - Refer to Calsense design guidelines for proper sizing. Use Calsense "Recommend Range".
 - ❑ Controller
 - Install one antenna for every controller.
 - Controllers for irrigation shall be Calsense and wired one (1) valve per output. Communications shall be via a customized cellular configuration using a combination of Calsense and third party components.
 - ❑ Piping
 - Locate mainline as close to hardscape edges as possible.
 - Do not pipe full and part or quarter turf rotor heads on the same valve.
 - Sleeve all wiring and waterlines under paving and supply a spare sleeve, same size as largest, capped at both ends under roadways. Mark sleeves with ball markers.
 - Pipe sprinkler heads following grade contours.
 - ❑ Automatic Control Valves
 - The total number of turf heads per valve and GPM flow rate shall not exceed 75% maximum flow rate of the backflow as measured on the downstream side of the backflow.
 - All valves shall be Rainbird with ball valves on the inlet side or approved equal.
 - Zones (Valves) GPM should be matched so that when (the maximum number of) combined (largest valves) in a single program line they will operate close to

- or equal to the POC (mainline size) assigned maximum GPM. Combine 2 or more turf valves not to exceed MAX POC.
- Reclaimed Valves to be PEB – no scrubber valves.
- Water Window: 9 p.m. to 6 a.m. for reclaimed water. (9 hours)
- Water Window: 9 p.m. to 6 a.m. for potable water. (9 hours)
- Water Window: Sports Complex with Lights 11 p.m. to 6 a.m. (7 hours)
- When using turf block or cells, design irrigation within these areas to be separate from adjacent areas for ease of operations.
- Sprinkler Heads
 - When recycled water is used, avoid direct spray onto picnic tables & drinking fountains.
 - Discuss head layout concepts with Project Manager prior to design. Multi-head (rotor) layouts in turf for long turf growth are discouraged.
 - Heads shall be spaced to achieve maximum Distribution Uniformity (DU) and designed to the middle nozzle or middle of nozzle range to allow for maximum adjustability.
 - For turf areas wider than 20 feet:
 - use Rainbird, 8000 or 5500 series
 - use stainless steel riser
 - use risers 5" or taller.
 - use pressure regulators in heads
 - For turf areas less than 20 feet wide:
 - use Rainbird R-VAN nozzles
 - use Rainbird 1800 P45 or Hunter PROS-PRS40 series body
 - use 6" pop-up height
 - use pressure regulators in heads
 - use built-in check valve where needed to prevent low head drainage.
- Spray heads and bubblers for planted areas:
 - In areas where width is 8' or greater:
 - use Rainbird R-VAN nozzles
 - use Rainbird 1800 P45 or Hunter PROS-PRS40 series body
 - use reclaimed body cap when needed (-R)
 - use matched precipitation rates
 - use pressure regulators in heads
 - use built-in check valve where needed to prevent low head drainage.
 - use 12" minimum offset from hardscape where prevention of overspray and run-off is required.
 - Do not use head spacing greater than 20' in planted areas.
 - In areas where width is < 8':
 - use flood bubblers, stream bubblers, or other micro-emission devices
 - use Rainbird 1800 PRS series body
 - use check valve (SAM) when slopes are greater than 3%
 - use reclaimed body cap when needed
 - use pressure regulators in heads

- use of drip may be considered on narrow, sloped planters where no other technology is feasible, and will be reviewed on a case-by-case basis.
- Design systems with deep water bubblers to all trees. Tree bubblers shall be on a separate valve from other plantings.
- Design irrigation zones large enough to see flow on controller independently.
- Provide quick couplers at 300' on center. Provide potable connection at drinking fountain and picnic area locations.
- Sewer
 - Indicate sewer stub, depth of stub and proposed pipe routing.
 - If phased, indicate future manholes.
- Other
 - Comply with the City and State 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.
 - Provide a complete watering schedule per valve. The watering schedule shall be included in the project manual as a part of the specifications (appendix) or on the plans with expected precipitation rates per valve. The schedule shall list the area (in sq ft) that is irrigated by that valve.
 - All Consultants shall utilize the attached irrigation legend shown in Section 1B for standardization of symbols for commonly used equipment.
 - Do not irrigate within the tree canopy of existing Oak.
 - Points of connection, valves, gate valves, meters, and backflows shall be line size unless specifically approved by the Parks Department.
 - All swing joint components shall be the same size as the inlet of the sprinkler head to be connected.
 - Install a mow band to separate City maintained landscape areas from private maintained landscape areas for streetscapes.
 - Install a mow band to separate irrigation systems that use potable water from irrigation systems that use recycled water for streetscapes.
 - Install a mow band to delineate the end of a recycled mainline and the start of a different recycled mainline for streetscapes.
 - Recycled water signs shall be at park entrances only.
 - No planter area shall be less than 4' wide at its minimum width.
- Baseball/softball infield irrigation: (See PK-51 and PK-52)
 - Install a minimum of four (4) rotors on all infields; refer to PK-51 and PK-52. Use Rainbird 8000 heads. Set heads a minimum of four inches (4") and a maximum of six inches (6") into the turf 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 brass manual irrigation valve after the RCV to turn on the infield line.
 - Infield watering must be connected to potable water supply. Ensure there is adequate pressure to operate valves not using a booster pump.

Landscape Standards

- ❑ It should be noted that each specific plan area was carefully planned to create a unique aesthetic using plant material as a key component to achieve the aesthetic goals of the area. Selected plant material should consider the original goals outlined in the design guidelines specific to each plan area.
- ❑ Overall Landscape Concepts must:
 - Meet Water Efficient Landscape Ordinance (WELO) goals for water conservation,
 - Ensure diversity in trees, shrubs and groundcovers.
 - Include a mix of seasonal color/flowers (no annuals);
 - Consider location for height of plants at maturity
 - Against buildings/walls: taller plants against wall with layers of descending heights toward the front of planter with groundcover or sub shrubs in front 6" or lower at maturity;
 - In the open (planters with sidewalks on both sides, pathway one side/turf on other, streetscape medians, etc.): taller plants in the center with descending mature heights toward both edges and groundcover or sub shrubs at outer edges (6" or lower);
 - On berms taller than 2' from finish grade: sub shrubs or groundcover (6" or lower) only (total height with plantings at maturity to be 30" or less unless berm is existing);
 - Avoid use of woody stemmed shrubs;
 - Consider walk-on turf alternatives (low groundcover-types);
 - Use perennials to add color, but ensure evergreen are dominant in the planters.
 - Evergreens to provide mix of texture, leaf color and proven longevity;
 - Focus on water conserving plants and not natives, succulents or water thirsty plants;
 - Use multiple types of trees, shrubs and groundcovers (avoid designs that utilize only one tree, one shrub and one groundcover species);
 - Review and contrast specific plan design guidelines with plant material noted in the Parks Construction Standards and current master gardeners/national nursery associations' plant cultivation advances

Landscaping for Parks

- ❑ Designs of parks and streetscapes shall maximize use of water-wise plants to the extent possible. Turf shall be designed for functional use for recreational purposes. Eliminate all non-functional turf.
- ❑ Where space allows, provide tree groupings in groves rather than in singles or rows in equal intervals, unless the design dictates the need.
- ❑ Provide a ten-foot (10') clearance between the tree trunk and the edge of hardscape, locate trees in center of planted areas and not in a straight row.
- ❑ Provide an eight-foot (8') minimum clearance between trees and other site improvements, including shrubs.

- ❑ Provide an entry planted (non turf) area to locate the park identification sign. Provide three to five (3-5) specialty roses to accent the sign. See City Project Manager for specific type.
- ❑ Refer to the list provided for preferred trees. Selected trees shall fulfill the following criteria:
 - For all areas with drains, do not plant trees within 12' of the drain, whenever possible.
 - Be appropriate to the site specific environment;
 - Tolerates heavy soil conditions;
 - Tolerates freeze;
 - Is considered disease and pest resistant;
 - Is known to have a deep rooting system (not shallow rooted) and
 - Tolerates heat (is not susceptible to sunburn).
 - Tree species, which are known for shallow root systems may be considered acceptable if located within a planted area and/or planted with root barrier panels.
 - When providing tree cut outs within hardscape, provide a five-foot (5') diameter round or square cut out. When budgets allow, include tree grates.
 - Planting sizes shall be:
 - 15 gallon for trees
 - 5 gallon for shrubs
 - 1 gallon for vines, selected shrubs and groundcovers
 - Flats for groundcovers
 - *Size variations to be accepted by the City.*
 - Medium to large trees shall be spaced no closer than 25' on center.
 - Trees shall be planted no closer than 15' to any light fixture or structure.
 - Landscape plans shall draw all plantings, including trees at the mature widths.
 - Plants shall be located away from edge of pavement equal to the radius of the shrub at maturity, plus one foot. (E.g., a shrub that will grow to a 4' width at maturity shall be placed no closer than 3' from edge of pavement.)
- ❑ Berms shall not exceed 30" in height. This shall include plant material at maturity.
- ❑ Obtain a soils fertility test and report and include amendment recommendations as a part of improvement plans/construction documents.
- ❑ For trees located within open space or natural areas, install drain tiles within the plant basin.
- ❑ The application of recycled mulches may be considered on a specific case-by-case basis in compliance with SB1383's Recovered Organic Waste Product Procurement Targets. Discuss suitability with project manager.

Landscaping for Streetscape

- ❑ Grading & Drainage
 - Berms shall not exceed 30" in height. This shall include plant material at maturity.
 - Slopes greater than 3:1 are not permitted. If unavoidable circumstances arise during construction, a solution for future erosion of bark and soils must be provided for all slopes greater than 3:1. A drainage plan showing a constructed

- drainage solution must be provided. Approval of the proposed drainage solution must be obtained from the Parks and Recreation Department prior to installation.
- Streetscapes shall not solely rely on surface drainage to address run-off issues. Hard pipe or other designed drainage systems shall be included in all design solutions.
 - Run-off shall be collected and satisfactorily addressed in order to avoid excessive water on sidewalks and/or bike trails.
- Landscaping
- Tree and plant selection shall be consistent with the specific plan design guidelines AND these Parks Construction Standards.
 - In addition to the original goals of the specific plan, consideration related to major arterials and collector streets that cross specific plan areas or that stretches for long lengths should consider continuity of the plantings. This can be achieved in many ways:
 - Consistent street tree choices;
 - Groupings of a common tree species throughout the length of the road;
 - Use of a common shrubs and groundcover in groupings;
 - Specialty paving in the noses and crossings that convey continuity.
 - All landscape plans shall show sight distance triangles (to be confirmed by the project engineer), signs, streets lights, utility boxes, fire hydrants and any other appurtenances that will affect landscape and irrigation installation.
 - Plantings within the sight distance triangles shall be no taller than 12" at mature height.
 - For unsignalized left turn lanes, landscaping shall be no taller than 12" at mature height for a distance of 175' as measured from the nose of the median.
 - Trees in medians to be in two rows and offset to avoid a visual "picket fence" effect.
 - Obtain a soils fertility test and report and include as a part of improvement plans/construction documents.
 - A soils fertility test shall be obtained by the contractor and submitted for review prior to adding soil amendments. The soils fertility test shall include recommendations for amendments.
- Irrigation
- A master irrigation plan shall be developed, submitted and approved with the first phase of sub-phase of a development plan set.
 - The master irrigation plan shall show mainlines and sizes (gallons per minute and pressure), separate point of connections and sizes for each sub-phase, controller sizes, sleeves sizes and locations and valve sizes and locations.
 - Once approved, the master irrigation plan shall be included with each subsequent phase of sub-phased improvement plans.
 - Also, approved sleeve locations shall be reflected on the civil plans.
 - All plans must include a separation of City maintained irrigation and privately maintained irrigation for all irrigation areas shown on the plans. Separation of

- services includes but is not limited to the following: water meter, backflows, main line, lateral lines, valves, sprinkler layout, drip lines and all other irrigation related items.
- City maintained irrigation lines, including the main line must not be constructed in privately maintained landscape areas or private property. The separation of City maintained irrigation and privately maintained irrigation must be easily identified on the plans to receive plan approval.
 - If the plans do not contain any City maintained irrigation a note stating this must be shown on each sheet containing irrigation plans.
 - Comply to extent reasonable with the City's water conservation ordinance.
 - All equipment and components of the irrigation system shall be consistent to these Parks Construction Standards. No substitutions are allowed, unless specifically approved.
 - Points of connection, valves, gate valves, meters, and backflows shall be line size unless specifically approved by the Parks Department.
 - For streetscapes, booster pumps are not considered a solution to address low pressure concerns and shall not be used.
 - All swing joint components shall be the same size as the inlet of the sprinkler head to be connected.
 - Master valve shall be Superior.
 - Place mainline in parkway strip if planter is 10' or wider. Otherwise, place mainline in 2' bench at back of walk.
 - Parkway strips under 8' width may use Rainbird R-Van side strip and corner strip nozzles, as appropriate.
 - Areas where width is 4' – 6' (such as tapered noses of medians) should remain unirrigated and unplanted, mulched only. Under 4' should be paved.
- On-Site Amenities
- Entry monuments and signs shall be designed to include monolithic signage or lettering that is connected as one component. Single lettering is prohibited. All signs and lettering shall be bolted in place and must be flush against surface. Use of epoxy only is prohibited.
 - All plans must include a physical separation, such as a concrete mow band between City maintained landscape and privately maintained landscape. The separation of City maintained landscape and privately maintained landscape must be easily identified on the plans to receive plan approval. If the plans do not contain any City maintained landscape areas a note stating this must be shown on each sheet containing landscape plans.
 - Selected stone veneer or stonework shall be available on a long-term basis to ensure future repair work will provide consistency in aesthetics. All veneer shall be grouted in place.
 - Accent lighting shall be above-ground, up-light fixtures, or set in the entry walls. Use LED bulbs. All fixtures shall be readily available, with a realistic lead-time for replacement orders. No fixture shall be placed in turf areas.
 - Planters and seat walls 4' high and lower with adjacent pavement or hardscape shall be designed to include skate deterrents as an integral part of

the wall cap design. Third party add-on products such as “Skate Block” are prohibited.

Flatwork

- ❑ Concrete
 - Standard walkway finish shall be medium broom finish, unless identified as a special paving area.
 - Provide at least one path of travel to all major amenities within the park design where the concrete pathway is at least ten feet (10') wide for use by service vehicles. All curves within this route shall contain curves no smaller than ten feet (10') in radius.
 - Concrete mow bands, and concrete collars around light fixtures in turf areas shall be per details PK-27 and PK-29, unless otherwise accepted.
 - Concrete pads for light fixtures, benches, picnic tables or other site furnishings shall use 45-degree (or similar) angles rather than 90-degree angles.
 - Concrete pathways and other standard flatwork applications, shall be installed with fiber mesh at a (concrete section) depth of five inches (5"). Do not include welded wire mesh or rebar, unless otherwise accepted.
 - Install barbeques within decomposed granite. Barbeques shall not be installed within plantings areas or within the concrete picnic pad.
 - Color shall be integral.
- ❑ Asphalt Concrete Bike Paths and Miscellaneous Pads
 - Bike paths shall be a minimum of ten-feet (10') wide with a two-foot (2') wide AB shoulder on one side and a two-foot (2') wide decomposed granite shoulder on the other side of the path (for joggers/pedestrians) as shown in Development Services Construction detail BK-1 and BK-2.
 - Bike path access shall be protected from private vehicle traffic through the use of collapsible bollards, stationary bollards, boulders and post and cable fencing.
 - Bike paths that serve as fire access lanes to wild land environments must have a minimum turning radius of twenty-two feet (22') inside diameter and thirty-two feet (32') outside diameter. The bike path shall be capable of supporting a minimum GVW of 30,000 pounds.
 - Other AC paving (including parking lots) shall be per Development Services Construction Standards.
 - Include a redwood header on the outside edges of the DG shoulder when located within a developed park.
 - For additional bike trail construction requirements, see Public Works Design and Construction Standards.
- ❑ Decomposed Granite (DG) Paving
 - Do not install DG in areas, which exceed a longitudinal slope greater than 3%.
 - Provide a cross slope not-to-exceed 2%.
 - Install per detail PK-33.
- ❑ Header
 - Install per PK-25.

- Install at both edges of AC or DG pathways within developed park boundaries. Required edging on open space trails shall be determined on a case-by-case basis.

Post & Cable Fencing

- ❑ Install per PK-41.
- ❑ Fire access points through the post and cable assembly shall be provided at a maximum interval of 750 feet. The cable crossing the fire access point shall be yellow, plastic coated cable in order to delineate the access points. The ends of the access point cable shall be secured to the posts in a similar fashion as the terminal post anchor, with the exception of adding a City of Roseville padlock connecting each end of the cable to the eyebolt.

Restrooms and Outdoor Sinks

- ❑ Do not specify porcelain fixtures.
- ❑ Use heavy-duty fixtures only, i.e. Chicago or accepted equal.
- ❑ Use polished concrete (flooring) 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.
- ❑ See the City Parks standard restroom plans. Contact the Project Manager to obtain information.
- ❑ Sewer connections shall be installed similarly to that described for the water connection and per EU approval. See page 6 of this Section under "Irrigation Meter".
- ❑ Do not use dead-bolt locks. Use a latch/lock handle.
- ❑ Use unisex signage.
- ❑ Lights shall be "LED high abuse security light similar to "Utilitech" 26-W model # 0208819 or approved equal. Timers shall be "Leviton" digital timer switch # VPT24-1P or approved equal.
- ❑ Restroom locks shall be "Schlage" dorm locks #ND73PD RHO626 or approved equal.
- ❑ Doors to be keyed to City Standard

Pre-Fabricated and/or Proprietary Structures

- ❑ Consult with the Building Department for requirements for structural calculations. Some items may be accepted as a deferred submittal. Determination shall be included in the Design Development 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)."
- ❑ Bridges that serve as fire access lanes to wild land environments shall be constructed to allow for twelve feet (12') clear width, capable of supporting a minimum GVW of 30,000 pounds and shall allow a straight-line approach of a minimum of thirty-five feet (35').

- ❑ Submit structural calculations wet signed by a California licensed structural engineer.
- ❑ Submit shop drawings as a part of the construction submittal process.

Site Electrical

- ❑ Provide two separate circuits for pathway/security lighting throughout the park per the Parks Construction Standards.
- ❑ Security lighting shall be 25% of all fixtures, to be finalized upon design.
- ❑ Locate an outdoor GFI dual outlet, weatherproof, vandal-resistant cover in all group picnic areas mounting shall be mounted flush at top of post near roof.
- ❑ Metered service panels and service points shall be approved by the Electric Department. Where questions arise regarding acceptable standards, contact the Electric Department directly.
- ❑ Playing field lights shall be operated by a Musco control link system or accepted equal.
- ❑ Restrooms shall be on a separate circuit.
- ❑ Outlets flushed with wall.

Lighting for Security Purposes

- ❑ Coverage is for potential gathering places when the park is closed for ease of police surveillance.

Upon Approval of Master Plan

- ❑ Upon completion and prior to Parks & Recreation Commission hearing and City Council approval of the Master Plan, provide:
 - a full size rendering laminated and mounted on foam core board;
 - a digital file of the color rendering, jpg & pdf formats.
 - an 8-1/2"x11" color reduction (largest image possible),
 - an 8-1/2"x11" black and white reduction (largest image possible), and
 - an Estimate of Probable Costs.

Neighborhood and Pocket Park Design Criteria

Design

- ❑ Each park is to create a different look, theme or contain an element not already used in other City of Roseville parks.
- ❑ Comply with the current Parks Construction Standards.
- ❑ Elements to include, but not limited to:
 - Usable/turf for purposes of recreation
 - Maximize water-wise landscape areas where non-functional turf have traditionally been placed.
 - Design for one hour stay
 - One school-aged children's play area
 - One to two bay swings (2 – 4 actual swings)
 - Four and up picnic tables under a shaded shelter
 - Two – three picnic tables scattered within the park

- Benches
- Concrete pathways
- Service access for maintenance to the picnic and play area
- ADA accessibility through-out
- One – two security lights
- One drinking fountain
- One park identification sign

Open Space Standards

- ❑ Provide a 10' clearance between toe of slopes and open space fencing/barriers for maintenance access
- ❑ Provide a master access plan for open space within a plan area to strategically identify access points for maintenance access into the open space
- ❑ All wetlands shall be flagged and fenced using orange construction fencing prior to start of any clearing and grading operations
- ❑ Slopes onto the open space shall be 3:1 maximum
- ❑ For landscapes adjacent to open space, use only native, non-invasive plantings
- ❑ Irrigation in landscaped areas adjacent to open space shall be designed to avoid all over-spray
- ❑ Over-grading onto Open Space shall be avoided
- ❑ Increased run-off due to new development on adjacent property shall be avoided or shall be collected into a piped storm drain system and conveyed to an acceptable receiving water. Daylighting onto Open Space is prohibited.



Parks, Recreation & Libraries Department

**Section 1B:
DESIGN DEVELOPMENT**

Preferred Tree List

The following list includes the Department's preferred tree species. Additional species may be suggested by the Consultant, which will be considered during the 75% construction document submittal phase of work.

Planting sizes to be 15 gallon. Variations in size shall be approved by the City.

PREFERRED TREE PLANT PALETTE								
Botanical Name	Common Name	Size	WUCOLS Region 2	(OPALS) Allergen	Reclaimed Water Tolerance	Locally Native	Suitable for Turf Planting	Notes
Small Trees (Less Than 15') for Landscape Areas 4' in Width and Larger, Suitable for Planting under Power Lines								
Acca sellowiana	Pineapple Guava	15'T x 12'S	L	3	L			E,F
Cercis occidentalis 'Oklahoma'	Oklahoma Redbud	12'T x 12'S	VL	4	M			A,D,F,W
Cotinus coggygria 'Royal Purple'	'Royal Purple' Smoke Tree	15'T x 12'S	L	--	M			D
Heteromeles arbutifolia	Toyon	12'T x 12'S	VL	3	H	✓		E,F,W
Lagerstroemia 'Tuskegee'	Pink Flower Crape Myrtle	15'T x 18'S	L	5	L			A,D,F,W
Photinia fraseri	Red-Leaf Photinia	15'T x 10'S	M	4	M			E,W
Medium Trees (15' – 40') for Landscape Areas 6' in Width and Larger								
Acer buergerianum	Trident Maple	25'T x 25'S	M	6	M			D
Acer campestre	Hedge Maple	35'T x 30'S	M	6	M		✓	D,W
Acer ginnala 'Flame'	Flame Maple	20'T x 20'S	M	4	--			D
Acer griseum	Paperbark Maple	25'T x 20'S	M	6	--		✓	D
Acer negundo	Box Elder	30'T x 25'S	M	F1/M10	--		✓	D
Acer tataricum ginnala	Amur Maple	20'T x 20'S	M	5	--			D
Arbutus unedo	Strawberry Tree	20'T x 20'S	M	3	H			E,F
Cercis canadensis	Eastern Redbud	20'T x 25'S	VL	4	L			A,D,F,W
Chionanthus retusus	Chinese Fringe Tree	25'T x 25'S	M	F1/M8	H			D,F
Crataegus laevigata	English Hawthorn	25'T x 20'S	M	3	M			E
Geijera parviflora	Australian Willow	35'T x 20'S	M	5	H			E,W
Gleditsia triacanth. 'Rubylace'	'Rubylace' Honey Locust	30'T x 25'S	L	F1/M7	H		✓	D,F
Koelreuteria bipinnata	Golden Flame Tree	35'T x 25'S	M	--	--			D,F
Koelreuteria paniculata	Golden Rain Tree	25'T x 30'S	M	4	H			D,F
Laburnum anagyroides	Golden Chain Tree	25'T x 20'S	M	7	--			D,F
Lagerstroemia 'Muskogee'	Pink Flower Crape Myrtle	25'T x 12'S	L	5	L			A,D,F,W

Lagerstroemia 'Natchez'	White Flower Crape Myrtle	25'T x 12'S	L	5	L			A,D,F,W
Laurus nobilis	Sweet Bay Laurel	30'T x 30'S	L	1	H			E,W
Magnolia s. 'Alexandrina'	Alexander Magnolia	25'T x 25'S	M	4	--			D,F
Malus x 'Prairifire'	Crabapple 'Prairifire'	20'T x 20'S	M	4	L		✓	A,D,F,W
Parkinsonia aculeata	Palo Verde Tree	25'T x 25'S	VL	5	H			D,F,W
Prunus caroliniana	Carolina Cherry Laurel	30'T x 20'S	L	6	M			E,F
Searsia lancea (Rhus lancea)	African Sumac	20'T x 20'S	L	8	H			E,W
Styrax japonicas	Japanese Snowball	30'T x 20'S	M	4	--		✓	D,F
Styrax obassia	Fragrant Snowball	30'T x 20'S	--	4	--		✓	D,F,W
Syringa reticulata	Japanese Lilac	35'T x 30'S	M	6	M			A,D,F
Ulmus propinqua 'JFS-Bieberich'	Emerald Sunshine Elm	35'T x 25'S	M	9	M		✓	D,W
Umbellularia californica	California Bay	40'T x 15'S	M	6	--		✓	E,W
Vitex agnus-castus	Chaste Tree	25'T x 20'S	L	4	M			A,D,F
Zelkova serrata 'Wireless'	Japanese Zelkova 'Wireless'	25'T x 40'S	M	8	M			D
Large Tree (40' – 60') for Landscape Areas 8' in Width and Larger								
Aesculus hippocastanum	Horse Chestnut	60'T x 50'S	M	7	L		✓	D,F,W
Acer rubrum 'October Glory'	October Glory Maple	50'T x 40'S	M	1	L		✓	D,W
Acer rubrum 'Franksred'	Red Sunset Maple	45'T x 30'S	M	1	L		✓	D,W
Carpinus betulus	European Hornbeam	40'T x 25'S	M	7	--		✓	D
Celtis occidentalis	Common Hackberry	60'T x 50'S	L	7	L		✓	D,W
Nyssa sylvatica	Sour Gum	50'T x 25'S	M	8	M			D,W
Pistacia chinensis	Chinese Pistachio	50'T x 50'S	L	8	M		✓	D
Styphnolobium japonicum	Japanese Pagoda	50'T x 40'S	L	--	H		✓	D
Ulmus davidiana 'Morton'	Accolade Elm	50'T x 35'S	M	9	--		✓	D
Zelkova serrata	Japanese Zelkova	50'T x 50'S	M	8	M		✓	D
Very Large Tree (Greater Than 60') for Landscape Areas 12' in Width and Larger								
Cedrus atlantica	Atlas Cedar	70'T x 40'S	M	2	M		✓	E
Cedrus deodara	Deodar Cedar	70'T x 40'S	L	6	H		✓	E,W
Magnolia grandiflora	Southern Magnolia	80'T x 50'S	M	5	L		✓	E,F
Platanus racemosa	California Sycamore	60'T x 50'S	M	8	H	✓	✓	D
Platanus x hispanica	London Plane Tree	60'T x 50'S	M	8	H		✓	D
Quercus agrifolia	Coast Live Oak	60'T x 60'S	VL	9	H			E,W
Quercus douglasii	Blue Oak	70'T x 30'S	L	9	--	✓		D,W
Quercus ilex	Holly Oak	50'T x 50'S	L	9	H			E,W

Quercus kelloggii	California Black Oak	60'T x 60'S	L	9	--	✓		D,W
Quercus lobata	Valley Oak	80'T x 80'S	L	8	M	✓		D,W
Quercus suber	Cork Oak	50'T x 50'S	L	9	M		✓	E,W
Quercus virginiana	Southern Live Oak	60'T x 45'S	M	9	H			E,W
Quercus wislizenii	Interior Live Oak	60'T x 50'S	L	9	--	✓		E,W

APPROVED SHRUBS, GRASSES, GROUNDCOVERS AND VINES PLANT PALLETTE							
Botanical Name	Common Name	Size	WUCOLS Region 2	(OPALS) Allergen	Reclaimed Water Friendly	Locally Native	Notes
Low Growth Shrubbery (1' – 2' Tall) for Landscape Areas 4' in Width and Larger							
Baccharis pilularis	Dwarf Coyote Brush	2'T x 6'S	L	F1/M9	H		E,W
Epilobium canum	California Fuchsia	2'T x 4'S	L	6	H	✓	D,F,W
Erigeron karvinskianus	Santa Barbara Daisy	1'T x 2'S	L	4	H		E,F,W
Gaura lindheimeri	Gaura	2'T x 2'S	M	2	M		E,F,W
Gazania hybrids	Clumping Gazania	0.5'T x 1'S	M	4	H		E,F,W
Grevillea 'Mt. Tamboritha'	'Mt. Tamboritha' Grevilla	2'T x 4'S	L	5	M		E,F
Mahonia repens	Creeping Oregon Grape	2'T x 4'S	L	2	L	✓	E,F,W
Nandina domestica 'Harbour Dwarf'	'Harbour Dwarf' Nandina	2'T x 3'S	L	1	L		E
Nepeta x faassenii	Catmint	1'T x 2'S	L	2	H		D,F,W
Rhaphiolepis indica 'Ballerina'	'Ballerina' Hawthorne	2'T x 4'S	L	3	H		E,F,W
Salvia chamaedryoides	Mexican Blue Sage	2'T x 4'S	L	4	--		E,F,R,W
Spirea japonica 'Goldmound'	Goldmound Spirea	3'T x 4'S	M	5	M		D,F,W
Teucrium chamaedrys	Dwarf Germander	1'T x 2'S	L	--	M		E,F,W
Viburnum davidii	David Viburnum	3'T x 4'S	M	5	L		E,F
Medium Growth Shrubbery (3' – 6' Tall) for Landscape Areas 4' in Width and Larger							
Berberis t. 'Atropurpurea'	Red Leaf Japanese Barberry	4'T x 4'S	M	3	L		D,W
Callistemon viminalis 'Little Johns'	Little John's Bottlebrush	3'T x 3'S	L	9	H		E,F,W
Ceanothus gloriosus 'Yankee Point'	Wild Lilac 'Yankee Point'	3'T x 8'S	L	4	H		E,F,W
Ceanothus maritimus 'Valley Violet'	'Valley Violet' Ceanothus	4'T x 4'S	L	3	H		E,F,W
Ceanothus thyrsiflorus 'Skylark'	Skylark Ceanothus	5'T x 5'S	L	3	H		E,F,W
Cistus x hybridus	White Rockrose	4'T x 6'S	L	3	H		E,F,R,W
Cistus x purpureus	Orchid Rockrose	4'T x 4'S	L	3	H		E,F,R,W
Coleonema pulchellum 'Sunset Gold'	Golden Breath of Heaven	4'T x 5'S	M	4	H		E,F

Forsythia x intermedia 'Kolgold'	Gold Forsythia	5'T x 4'S	L	6	M		D,F,W
Frangula californica 'Mound San Bruno'	Mound San Bruno Coffeeberry	6'T x 6'S	L	--	--		E,F,W
Grevillea x 'Noellii'	Noell Grevillea	4'T x 5'S	L	5	M		E,F,W
Hesperaloe parviflora	Red Yucca	3'T x 3'S	L	1	H		E,F
Leucadendron 'Jester'	Jester Conebush	4'T x 4'S	L	4	L		E
Leucophyllum frutescens 'Compacta'	Compact Texas Ranger	5'T x 5'S	L	2	H		E,F,W
Loropetalum 'Rubrum'	Chinese Fringe Flower Rubrum	5'T x 5'S	M	4	M		E,F
Myrtus communis 'Compacta'	Dwarf Myrtle	3'T x 3'S	L	5	H		E,F,W
Nandina domestica 'Gulf Stream'	Gulf Stream Nandina	3'T x 3'S	L	1	L		E,W
Olea europea 'Little Ollie'	Little Ollie Olive	6'T x 6'S	VL	10	H		E
Pinus mugo var. pumilio	Dwarf Mugo Pine	5'T x 6'S	L	4	H		E
Pittosporum tobira 'Wheeler's Dwarf'	Wheeler's Dwarf Pittosporum	4'T x 4'S	M	F1/M7	H		E
Punica granatum 'Nana'	Dwarf Pomegranate	3'T x 3'S	L	2	M		D,F,W
Rhaphiolepis 'minor'	'Dwarf Yedda' Hawthorne	5'T x 5'S	L	3	M		E,F,W
Rosemarinus 'Tuscan Blue'	Tuscan Blue Rosemary	6'T x 2'S	L	4	H		E,F,W
Salvia greggii	Autumn Sage	3'T x 3'S	L	4	H		E,F,R,W
Salvia microphylla	Red Sage	3'T x 3'S	L	4	--		E,F,R,W
Teucrium fruticans 'Compactum'	Dwarf Bush Germander	3'T x 3'S	L	2	H		E,F,W
Westringia fruticosa 'Morning Light'	Coast Rosemary	3'T x 3'S	L	2	H		E,F
Groundcovers (Less Than 2' Tall) for Landscape Areas 4' in Width and Larger							
Acacia redolens 'Low Boy'	Prostrate Acacia	2'T x 10'S	VL	8	H		E
Arctostaphylos 'Emerald Carpet'	'Emerald Carpet' Manzanita	1'T x 5'S	M	2	H		E,W
Cotoneaster dammeri 'Lowfast'	Bearberry 'Lowfast'	1'T x 8'S	L	3	M		E,F,W
Juniperus procumbens 'Nana'	Dwarf Garden Juniper	1'T x 6'S	L	--	H		E
Juniperus sabina 'Buffalo'	'Buffalo' Juniper	1'T x 6'S	L	1	H		E
Lantana montevidensis	Trailing Lantana	2'T x 6'S	L	2	H		D,F,W
Myoporum parvifolium 'Putah Creek'	'Putah Creek' Myoporum	0.5'T x 8'S	L	2	H	✓	E
Rosa x 'Noatraum'	Pink Carpet Rose	2'T x 3'S	L	--	M		D,F,W
Trachelospermum asiaticum	Asian Jasmine	2'T x 10'S	M	5	M		E,F
Ornamental Grasses (Less Than 3' Tall) for Landscape Areas 4' in Width and Larger							
Calamagrostis x acutiflora	'Karl Forrester' Feather Reed	2'T x 2'S	L	--	H		D,W
Carex divulsa	European Gray Sedge	1'T x 1'S	L	8	M		E
Carex pansa	Meadow Sedge	1'T x 1.5'S	M	8	--	✓	E
Carex praegracilllis	California Field Sedge	1'T x 2'S	M	--	--	✓	E
Carex tumulicola	Berkeley Sedge	1.5'T x 2'S	L	--	--	✓	E
Chondropetalum tectorum	Cape Rush	3'T x 4'S	L	--	H		E,W

Dianella caerulea	Flax Lily	2'T x 2'S	L	3	H		E,F
Dianella revoluta 'Baby Bliss'	'Baby Blue' Flax Lily	1.5'T x 1.5'S	L	3	--		E,F
Dianella revoluta 'Little Rev'	'Little Rev' Flax Lily	2'T x 2'S	L	3	--		E,F
Dietes bicolor	Butterfly Iris	3'T x 3'S	L	2	M		E,F
Festuca glauca	Blue Fescue	1'T x 1'S	L	6	M		E
Festuca mairei	Atlas Fescue	2'T x 2'S	L	6	H		D
Hemerocallis x hybrids	Evergreen Daylily	2'T x 2'S	M	6	H		E,F,R,W
Hemerocallis x 'Stella de Oro'	'Stella de Oro' Daylily	2'T x 2'S	M	6	H		D,F,R,W
Juncus patens	California Gray Rush	2'T x 2'S	M	--	H	✓	E,W
Kniphofia spp.	Red Hot Poker	2'T x 1'S	L	4	M		E,F,R
Liriope muscri cvs.	Big Blue Lily Turf	1'T x 1'S	M	3	M		E,F,R
Lomandra 'Breeze'	Dwarf Mat Rush	2'T x 3'S	L	7	H		E
Melinis nervigumis	Rubygrass	2'T x 2'S	M	--	--		D
Muhlenbergia capillaris	Pink Muhly Grass	3'T x 3'S	L	--	H		D,W
Muhlenbergia rigens	Deer Grass	3'T x 3'S	L	--	H	✓	D,W
Pennisetum 'Little Bunny'	'Little Bunny' Fountain Grass	1'T x 1'S	L	8	H		D,W
Tulbaghia violacea	Society Garlic	1'T x 1'S	L	5	M		E,F,W
Tulbaghia violacea 'Silver Lace'	'Silver Lace' Society Garlic	1'T x 1'S	L	5	M		E,F,W
Vines, for Landscape Areas 18" in Width and Larger							
Clytostoma callistegioides	Lavender Trumpet Vine	Spreading	M	2	--		E,F,W
Ficus pumila	Creeping Fig	Spreading	M	--	H		E
Parthenocissus tricuspidata	Boston Ivy	Spreading	M	4	L		D

Not To Be Planted Within 20' of Any Infrastructure and Not to be Planted on Roseville City Property - Species have invasive root systems and create major hardscape damages	
Silver Maple	<i>Acer saccharinum</i>
Tree-of-Heaven	<i>Ailanthus altissima</i>
Mimosa / Silk Tree	<i>Albizia julibrissin</i>
White Alder	<i>Alnus rhombifolia</i>
Modesto Ash	<i>Fraxinus velutina 'Modesto'</i>
Glossy Privet	<i>Ligustrum lucidum</i>
American Sweet Gum	<i>Liquidambar styraciflua</i>
Mulberry family	<i>Morus species</i>
Grey Pine/Foothill Pine	<i>Pinus sabiniana</i>
Locust family	<i>Robinia species</i>
Willow family	<i>Salix species</i>
Cottonwood family	<i>Populus species</i>
Chinese Hackberry	<i>Celtis sinensis</i>
Chinese Tallow Tree	<i>Sapium sebiferum</i>

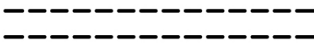
Standard Symbols for the Irrigation Legend



Pressure Mainline, Schedule 40 PVC, size as noted on the plans. *(Bold and distinctly different from other graphic lines).*



Non-pressurized Lateral Lines, Schedule 40 PVC, size as noted on the plans. *(Do not use pipe smaller than 3/4").*



Schedule 40 PVC Sleeve under pavement per Parks Standard detail PK-4.

POC

Point of Connection *(Label static water pressure and gallons per minute available at POC).*



Meter *(Note size, type and for which line type it applies).*



Backflow Prevention Device *(Note size, type and City standard detail).*



Flow Sensor per Parks Standard detail PK-2 *(Note size, and model #).*



Calsense (V.2) *(Note # of stations).* Install inside enclosure. See Specifications.



Gate/Ball Valves per Parks Standard detail PK-11 or PK-12. *(Note size, model #, manufacturer).*



Quick Coupler Valve, Rainbird 44RC per Parks Standard detail PK-14. *(Note size).*



Electric Remote Control Valve, size as noted on plans. *(Note type, model # and precipitation rate).*



Pop-Up Rotor *(Note nozzle size, radius, gpm and psi).*



Other sprinkler heads *(Note type, model, radius, gpm and psi. Use triangular, circular and square shapes, in that order).*



STATION NUMBER
VALVE SIZE
GALLONS PER MINUTE

RCV Valve Labeling Symbol *(Include Station number, gpm and valve size).*

Design Development

Upon Approval of Master Plan, Prepare Design Development Documents

- ❑ Use 22" x 34" size sheets is preferred. Plan information shall be contained within a 21" x 33" framework for eventual reduction to 11" x 17" size.
- ❑ The first sheet shall be the Title Sheet and shall include only the following items:
 - Vicinity Map
 - Sheet Index
 - Project Title
 - Consultant/Sub-consultant Names, Addresses and Phone Numbers
 - Professional Stamp with Name, License Number and Expiration Date clearly marked.
 - Signature Block for the Development Services Department, City Engineer, Date.
 - 2" x 2" box for Development Services (Engineering and Building) stamp plans upon approval.
 - ***Do not place general plan notes on this sheet. If space is available, these general notes shall be placed on the appropriate sheet to which the notes apply.***
- ❑ The second plan sheet shall be a Scope of Work Sheet. This sheet shall be an overall base plan identifying all types of construction including in project using textures and labels all add alternates and any deferred submittals and, if the project is to be phased, a sheet which clearly delineates the various park elements to be constructed under this contract by use of textures and labels.
- ❑ Provide the following individual plan sheets, as required for a complete set of working drawings:
 - Demolition (Use topographic survey, existing trees, wetlands, water courses, other natural features, existing utilities and stubs and other pertinent information as a part of the base map).
 - Grading & Drainage (These two sheets can be combined or separated depending on the amount of information which needs to be conveyed. Also include existing topographic information overlaid in a 35% halftone or CAD equivalent).
 - Erosion Control sheet is for reference only and to facilitate preparation of the Storm Water Pollution Prevention Plan (SWPPP). Include the following note "The SWPPP shall be implemented and monitored by the contractor and shall be a "living document" reflecting the status of construction work as it progresses."

- Staking & Reference (Include roadway stationing, if applicable; and existing street improvements, including street lights, transformers, fire hydrants, and water storm drain and sewer stubs.)
- Irrigation
- Planting (show proposed trees and shrubs/groundcover on one plan sheet. Include tree permit conditions and notes, if applicable.)
- Landscape Details
- Other trades' sheets
- The plan scale shall be no smaller than 1" = 30', preferably 1" = 20', unless otherwise approved. All plan sheets shall be drawn at the same scale and the north arrows shall be oriented in the same direction from sheet to sheet.

Specifications

- Revise Table of Contents as needed.
- Cover sheet shall be provided by the City, unless it is a turn-key project.
- Review basic sections provided, edit to reflect project needs.
- (First draft submittal shall show strikeouts and redlines. Do not delete shaded paragraphs until final version.) Non shaded paragraphs can not be modified only paragraphs that are shaded should contain revisions.
- Insert additional sections to reflect project needs consistent with format provided. (Modifications shall be Microsoft Word 2010 compatible, Arial font, 12 pt. Indicate all new sections.)
- Specifications shall be prepared and provided in 8-1/2" x 11" booklet form.
- ***The provision of these specifications does not relieve the Consultant of his/her responsibility to provide detailed and complete contract documents.***

Design Development 75% Completion

The purpose of this submittal is to refine design, select materials and address site issues.

(Note: Design Refinement and Materials Selection can occur before 75% submittal. A submittal is required for Parks internal review and comment. Provide electronic pdf plans which includes, at minimum):

- 100% complete Grading Plan with cut and fill calculations and drainage calculations (per City of Roseville Public Works Construction Standards, latest edition). Indicating number import, export or a balanced project.
- 100% complete Drainage Plan. (See #1 comment above and confirm underground stubs/utilities.)
- Partial Construction/Staking and Reference Plan indicating materials and detail references.
- Electrical Plan showing light location, POC and size of transformer.
- Irrigation Plan showing complete mainline layout with gate valves shown, head layout, controller type and location, sprinkler head type (e.g. model

number, manufacturer name, gpm, psi and radius in feet), point of connection location and the static water pressure at the point of connection. For projects where the subdivision has not yet been built, indicate the projected static water pressure at build-out.

- Planting Plan, including a plant list, soils analysis report (report to be consistent with test recommendations per Section 32 90 00- Planting, 1.06), a delineation of turf and groundcover areas, and tree locations.
- 75% of the construction details, including references to the City Standards by detail number.
- Determination of any deferred items have been identified and discussed with Building Department and noted on the plans.
- Updated estimate of probable costs.
- Checklist requirements

Design Development Completion Checklist

Project Name _____ Reviewed By: _____ Date: __/__/__

Grading

- ☐ Cut and fill calculations provided and addressed on plans.
- ☐ Playfield and courts sloped per Design Guidelines.
- ☐ Adequate level space provided at play fields for spectators.
- ☐ Walkways comply with ADA.
- ☐ Berms do not exceed 30" in height.

Drainage

- ☐ Design complies with Design Guidelines, including drainage calculations.

Site Improvements

- ☐ Layout of all site improvements are clearly shown on base map, including:
 - Fencing
 - Drinking Fountains
 - Site Furniture (benches, picnic tables, etc.)
 - Pavement by type
 - Poured-in-place items, i.e. seat wall, retaining walls, concrete curbs, mowstrips, etc.
 - Hard Court Surfaces
 - Overhead Structures
 - buildings
- ☐ Layout of improvements does not create unsafe conditions or conflict with adjacent uses.
- ☐ Layout complies with Design Guidelines.
- ☐ Proposal of unique construction materials and deferred submittal items are clearly shown. (Further discussion may be necessary).

Play Area

- ☐ Drainage and layout complies with Design Guidelines.
- ☐ Use zones are clearly marked and do not overlap, except between spring toys.
- ☐ A clear path of travel from the play area entrance to the transfer deck is shown in the most direct route.
- ☐ The swing area is visually and/or physically separated.
- ☐ At least one belt swing has an accessible non-friable play surface beneath connected to an accessible pathway.

Irrigation

- ☐ Sprinkler head layout is shown.
- ☐ Controller type and location is shown.
- ☐ Sprinkler types and models are listed.
- ☐ Point of connection and static water pressure (current and projected) is listed.

Planting

- ☐ A preliminary plant list is provided.
- ☐ Species shown on the list comply with Design Guidelines.
- ☐ Trees are shown and turf/groundcover areas are delineated.