

COMMUNITY DEVELOPMENT DEPARTMENT Planning Division

Administrative Landscape & Irrigation Plan Review

Attachment 2 - Planning Case P18-0608 Updated Landscape Plan Review Checklist

I. BACKGROUND INFORMATION

Case Number:

Project Name:

Project Address:

Total Landscape Area (Square Feet):

Land Use:

Case Planner:

Applicant:

Date:

II. DESIGN STANDARDS – GENERAL

Standard		Does the Project Meet the Standard?		
		YES		
the landscape and irrigation	VATER DISTRICT: Did the WMWD have comments on plans?			
PUBLIC WORKS: Did Pul plans?	blic Works have comments on the landscape and irrigation			
PUBLIC WORKS DEPARTMENT REQUIREMENTS: All requirements of the City's Public Works Department (<u>www.riversideca.gov/trees</u>) have been complied with, including the following:				
	are coordinated with the on-site landscaping, and the tree types, numbers, and required spacing of the trees are e plans.			
B. All plan ch have been pa	eck fees as determined by the Public Works Department aid.			
on the plans General p	notes, and planting and staking details have been included , as required by the Public Works Department. lanting and staking details can be found at: <u>deca.gov/pworks/drawings.asp</u>			

PARKWAY AREAS: Where provided, public parkways have been planted with living groundcover, with the overall maintenance the responsibility of the subject property owner.		
CONDITIONS OF APPROVAL: Have all landscape and irrigation conditions of approval of all associated project cases been addressed by these plans?		

III. DESIGN STANDARDS - LANDSCAPING

		Does the Project Meet the		
Standard	Standard?		!?	
	YES	NO	N/A	
PLANTING PLAN PREPARATION: The planting plan shall be prepared, wet- stamped, and signed by a licensed landscape architect, as defined in Section 19.570.120. Any plans submitted without the signature of a licensed landscape architect shall not be accepted for review.				
PRESERVATION: Existing plants and natural features are clearly identified. Significant specimens and features are specified to be preserved on the site as appropriate.				
LANDSCAPING FOR PROJECT ENHANCEMENT: The proposal uses plant materials creatively to accent entries, soften or reinforce building lines and draw attention to important features.				
SOFTENING HARD LINES: The proposal uses shrubbery at the base of building, freestanding and retaining walls to soften the hard edge between paving surfaces and wall surfaces.				
BUFFERING UNDESIRABLE VIEWS: Trees, shrubs and mounded groundcover are used to soften the view towards parking lots, loading areas, trash enclosures, storage areas, and the like. All backflow preventers, gas meters, transformers, air conditioning condensers, above ground pipes and valves or any other equipment has been shown on the plans with the appropriate landscape screening.				
SLOPES: Graded slopes are provided with sufficient landscaping and irrigation coverage for erosion control, and to soften the view to cut and fill slopes from surrounding public views.				
PARKING LOT SCREENING: Parking lots have been screened from street view in compliance with the Zoning Code (Section 19.580.090 – Parking Lot Landscaping) through the use of:				
 A. Between Parking Lot and Street Right-of-Way – Landscaping shall be designed and maintained for partial screening of vehicles to a minimum height of 3 feet, measured from the finished grade of the parking lot. Screening materials may include any combination of plant materials, earthen berms, solid masonry walls, raised planters, or other screening device deemed by the Zoning Administrator to comply with the intent of this requirement. This provision shall not apply in those instances where a masonry wall is required and when such property is used for a single-family regidence. 				
residence.B.Between Drive-Through Lane and Street Right-of-Way – An immediate 3-foot-high landscape screen shall be established along the outer edge of drive-through aisles. Screening materials may include a combination of plant materials, wall, raised planters, and berm as approved by the Zoning Administrator.				

Standard		Does the Project Meet the		
	Stanuaru		tandard	
		YES	NO	N/A
	bination of the above two items, or an alternative buffer subject written approval of the Planning Director.			
spaced minimum 5-gall planters to discourage po A minimum 12-inch co	ER AND END PLANTERS: Within the parking lot, closely lon shrubs are provided within the end row planters and finger edestrian traffic across these planters.			
	ING: Canopy trees are provided as follows to shade the parking			
a ratio grouped manner Trees s	ells: Trees shall be planted and maintained in all parking lots at of 1 tree for every 4 parking spaces (that may be clustered or d). The trees shall be placed throughout the parking lot in a that will ensure that all portions of the lot received tree shade. shall be a variety that provides a broad canopy. Section 090(A).			
	w Planters: One tree within each end planter, next to each stall. Two trees provided at the end of each double row of			
	Planters: One tree within each finger planter, centered with the t parking stall.			
D. Strip Pl	anters: One tree in line with the edge of the parking stall.			
STREET MEDIANS: H	ligh water use plants are prohibited in street medians.			
curbing, except when a condition of approval be				
locations of all backflow transformers, air condit equipment not otherwis	T SCREENING: Revise the landscape plan to show the w preventers (irrigation and double detector check), gas meters, ioning condensers, above ground pipes and valves or any other be designated for screening, and show how such equipment will ping. (Contact the Utilities Department for minimum clearances			
PLANTING PLAN: Pla	nting plans shall identify the following (Section 19.570.030):			
	shrubs, groundcovers, and turf areas within the proposed pe area, each clearly delineated by symbol and/or callout,			
commo	g legend indicating all plant species by botanical name and n name, spacing, Water Use Classification of Landscape Species DLS) plant classifications, and quantities of each type of plant by er size,			
	ation of hydrozones,			
d. Total ar	rea in square feet, devoted to landscaping, and a breakdown of l area by landscape hydrozones,			
	y lines, streets, and street names,			
f. Building	g locations, driveways, sidewalks, retaining walls, and other pe features,			
	riate scale and north arrow,			
	ecial Landscape Areas (SLA), as defined in Section 19.570.120			

Standard		Does the Project Meet the Standard?		
		YES	NO	N/A
i.	Type of mulch and application depth,			
:	Type and surface area of any water features,			
J. k.	Type and installation details of any applicable stormwater best			
К.	management practices,			
1.	Planting specifications and details including the recommendations from the soils analysis, pursuant to the provisions of Section 19.570.030,			
m.	Maximum Applied Water Allowance (MAWA) - Planting Plans shall be prepared using the following formula to establish a maximum water allowance:			
	MAWA (in gallons/yr)=(ET ₀)(0.62)[(ETAF x LA)+(1-ETAF x SLA)] ETAF is 0.55 for residential areas and 0.45 for non-residential areas For additional information, refer to the Riverside Citywide Design Guidelines, Appendix E, Water Efficient Landscaping and Irrigation Design Guidelines for further instruction and worksheet.			
n.	Estimated Total Water Use (ETWU) - ETWU for each designed hydrozone is calculated as follows: ETWU (in gallons/yr) = (ET _o)(0.62)[(ETAF x LA) +SLA] ETAF is calculated by dividing to Plant Factor (PF) by the Irrigation Efficiency (IE) IMPORTANT: The EAWU shall not exceed the MAWA for the project. For additional information, refer to the Riverside Citywide Design Guidelines, Appendix E, Water Efficient Landscaping and Irrigation Design Guidelines for further instruction and worksheet.			
in hydrozones relationship to separately. De allowed. For a	ES: Plants with the same water use classification shall be grouped together a with regard to their water, soils, sun, and shade requirements and in b buildings. Hydrozones with different water needs shall be irrigated eviation from these groupings are discouraged, but shall be conditionally additional information, refer to the Riverside Citywide Design Guidelines, Vater Efficient Landscaping and Irrigation Design Guidelines.			
PLANT VAR (minimum of 3 suited to River The WELO in efficient and c Design Guidel Guidelines, Se Invasive speci water bodies, environmental Canyon Spring That Should b Species Habita species. Section	IETY: The site landscaping makes use of a variety of plant materials, 3 types of trees, 3 types of shrubs and 2 types of groundcover) which are preside's inland climate. There is a mix of deciduous and evergreen trees. Incorporates by reference any plant list that promotes the use of water climate appropriate plant materials. Also refer to the Riverside Citywide lines, Appendix E, Water Efficient Landscaping and Irrigation Design betton V., Climate Appropriate Plant for the City of Riverside. The soft plants shall be avoided, especially near parks, buffers, greenbelts, and open spaces because of their potential to cause harm to ly sensitive areas. When a project is located in the Sycamore Canyon, gs, Mission Grove, or Canyon Crest Neighborhoods, Table 6-2 (<i>Plants De Avoided Adjacent to the MSHCP Conservation Area</i>) of the Multiple at Conservation Plan shall be consulted to avoid the use of invasive plant on 19.570.030. Table 6-2 can be found at: <u>www.wrc-rca.org</u>			
	TAINER SIZES: The minimum plant material size is generally consistent ards as established for review, including:			

Standard		Does the Project Meet the Standard?		
	YES	NO	N/A	
A. Flats: Acceptable for groundcovers; space to provide 100% coverage in approximately 6 months.				
B. 1-Gallon Plants: Acceptable for small accent plants and low shrubs intended as groundcover or border plantings.				
C. 5-Gallon Plants: Minimum acceptable size for large accent shrubs, screens, hedges and foundation plantings.				
D. 15-Gallon Plants: Minimum acceptable tree size (see below for 24" box and 36" box exceptions.				
E. 24" Box: Minimum acceptable tree size for 20% of trees in projects of 1 acre or larger in size.				
F. 36" Box: Minimum acceptable tree size for 10% of trees in projects of 1 acre or larger in size.				
PLANT PLACEMENT: Plants shall be placed in a manner considerate of solar orientation to maximize summer shade and winter solar gain, Section 19.570.030. For additional information, refer to the Riverside Citywide Design Guidelines, Appendix E, Water Efficient Landscaping and Irrigation Design Guidelines.				
TREES: Trees for shade shall be provided for residential, commercial, and industrial buildings, parking lots, and open space areas. These trees can be deciduous or evergreen and are to be incorporated for the purpose of energy and water conservation. Section 19.570.030.				
 PLANT SELECTION IN FIRE-PRONE AREAS: Plant selection for projects in fire-prone areas shall address fire safety and prevention. A defensible space or zone around a building or structure is required per Public Resources Code Section 4291(a) and (b). Fire prone plant materials and highly flammable mulches shall be avoided. Section 19.570.030. Public Resources Code (PRC) Section 4291(a) and (b) can be found at: http://www.leginfo.legislature.ca.gov. 				
 MULCH: All exposed soil surfaces of non-turf areas within the developed landscape area shall be mulched with a minimum three inch (3") layer of material, except in areas with groundcover planted from flats where mulch depth shall be one and one half inches (1 ½"), Section 19.570.030. For slope conditions, mulch products shall be carefully selected to help stabilize and control soil erosion. For additional information, refer to the Riverside Citywide Design Guidelines, Appendix E, Water Efficient Landscaping and Irrigation Design Guidelines. 				
LAWN AND SHRUB AREA SEPARATION: Concrete mow strips have been provided between all lawn and shrub areas for all non-residential projects.				
TURF: Turf areas shall be designed in response to functional needs and in compliance with the Maximum Applied Water Allowance, Section 19.570.030. For additional information, refer to the Riverside Citywide Design Guidelines, Appendix E, Water Efficient Landscaping and Irrigation Design Guidelines.				
DECORATIVE WATER FEATURES: Decorative water features shall use recirculating water systems Section 19 570 030				

IV. DESIGN STANDARDS - IRRIGATION

Standard		Does the Project Meet the Standard?		
Standard		No	N/A	
IRRIGATION DESIGN PLAN PREPARATION: The irrigation design plan shall be prepared, wet-stamped, and signed by a certified irrigation designer, as defined in Section 19.570.120 – Definitions, or a licensed landscape architect, as defined in Section 19.570.120 – Definitions. Section 19.570.030.	Yes			
WATER WASTE PREVENTION: All irrigation systems shall be designed to prevent runoff, over-spray, lowhead drainage and other similar conditions where water flows off-site on to adjacent property, non-irrigated areas, walk, roadways, or structures. Irrigation systems shall be designed, constructed, managed, and maintained to achieve as high an overall efficiency as possible. The irrigation system shall be designed to ensure that the dynamic pressure at each emission device is within the manufacturer's recommended pressure range for optimal performance. Section 19.570.030.				
RECYCLED WATER: Recycled water shall be used where available as the course for irrigation and decorative water features, consistent with Chapter 14.28 – Mandatory Use of Recycled Water. Section 19.570.070.				
Installation of recycled water systems (dual distribution systems) may be required by the Zoning Administrator to allow for the current and future use of recycled water. Section 19.570.070.				
Water systems for common open space areas shall use non-potable water, if approved facilities are made available by the water purveyor. Provisions for the conversion to a non-potable water system shall be provided within the landscape plan. Water systems designed to utilize non-potable water shall be designed to meet all applicable standards of the California Regional Water Quality Control Board, the Riverside County Health Department, and the water purveyor.				
DEDICATED LANDSCAPE WATER METERS: Shall be required for all non- residential projects with an irrigated area of 1,000 square feet but not more than 5,000 square feet and single-family residential projects with an irrigated area of 5,000 or more.				
BACKFLOW PREVENTION DEVICES: Shall be required to protect the water supply from contamination of the irrigation system. Not necessary when plan specifies the use of anti-siphon irrigation valves or when using recycled water systems. Section 19.570.030.				
MASTER VALVE: Shall be required on all projects except when the irrigation emission device is equipped with a low pressure shut down feature.				
FLOW SENSOR: Shall be required on all non-residential projects and residential projects over 5,000 square feet.				
MANUAL SHUT-OFF VALVE: A manual shut-off valve shall be required as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency or routine repair. Section 19.570.030.				
PRESSURE REGULATOR: A pressure regulating device shall be required when the static water pressure is above or below the recommended operating pressure of the irrigation system. Section 19.570.030.				
VALVE PLACEMENT: Valves are provided in below grade valve boxes to minimize vandalism and enhance the appearance of the irrigation system, except for small residential projects where above grade anti-siphon valves can be located adjacent to house and out of view from street.				

Standard		Does the Project		
		Meet the Standa		
	Yes	No	N/A	
IRRIGATION PIPES: The type of pipe, the pipe rating and pipe sizes are specified on the plans in a readable legend. Main lines are typically PVC Schedule 40, lateral lines are a minimum PVC Class 200, and lines under paving have PVC Schedule 40 sleeves.				
DESIGN FOR 100% OVERLAPPING COVERAGE: The irrigation system is designed to provide 100% overlapping side-to-side and head-to-head coverage.				
BROWN LINE PIPING: Brown line piping allowed on sloped areas, if staked properly.				
OVERHEAD IRRIGATION RESTRICTIONS: Overhead irrigation shall be limited to the hours between 6 p.m. and 10 a.m. This restriction shall be noted on the irrigation schedule. Section 19.570.030.				
SPRINKLER RISER PROTECTION: Triple swing joints are provided to protect all sprinkler heads. Flexible risers are required for all heads.				
 OVERHEAD IRRIGATION PLACEMENT: Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface. Allowable irrigation within the setback from non-permeable surfaces may include drip, drip line, or other low flow non-spray technology. This restriction may be modified if (Section 19.570.030): A. The landscape area is adjacent to permeable surfacing and no runoff occurs; or B. The adjacent non-permeable surfaces are designed and constructed to drain entirely to the landscaping; or C. The irrigation designer specifies an alternative design or technology, as part of the submittal, and clearly demonstrates strict adherence to the irrigation design plan requirements. Prevention of overspray and runoff must be confirmed during the irrigation audit. 				
DRIP SYSTEM: If a drip irrigation system is provided, all necessary tubing and emitters are specified, with appropriate connectors and staking indicated.				
LONG, NARROW, OR IRREGULARLY SHAPED AREAS: Areas including turf, less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or low-volume irrigation technology. Section 19.570.030(B)(11)				
PARKWAY AREAS: The irrigation system is extended into public parkways, where provided, to maintain the landscaping being installed.				
SPARSE PLANTING AREAS: Low volume irrigation is required in planters where sparse landscaping exists, which create areas of exposed mulch or decomposed granite between shrubs or shrub masses.				
SLOPES: Slopes greater than 25% (4:1) shall not be irrigated with an irrigation system with an application rate exceeding 0.75 inches per hour. This restriction may be modified if the landscape designer specifies an alternative design or technology, as part of the submittal, and clearly demonstrates no runoff or erosion will occur. Prevention of runoff and erosion must be confirmed during the irrigation audit. Section 19.570.030.				
IRRIGATION DESIGN PLAN: The irrigation design plan shall identify the following (Section 19.570.030):				
 a. Hydrozones. i. Each hydrozone shall be designated by number, letter or other notation. ii. A Hydrozone Information Table shall be prepared for each hydrozone. At a minimum, the table shall include hydrozone notation, irrigation equipment, hydrozone classification (low, moderate or high), and related square footages. 				

Standard		Does the Project Meet the Standard?		
		Yes	No	N/A
b.	The areas irrigated by each valve; with valve notaton, size, and total gpm clearly shown.			
С.	Irrigation point of connection (POC) to the water system;			
d.	Static water pressure at POC Section 19.570.030(B)(6);			
e.	Location and size of water meter(s), service laterals, and backflow preventers;			
f.	Location, size, and type of all components of the irrigation system, including automatic controllers, main and lateral lines, valves, sprinkler heads and nozzles, pressure regulator, drip and low volume irrigation equipment;			
g.	 Irrigation legend with the manufacturer name, model number, and general description for all specified equipment, separate symbols for all irrigation devices with different spray patterns, spray radius, drip flow rates, drip emitter and line spacing, and precipitation rates. i. Total flow rate in gallons per minute (gpm) and/or gallons per hour (gph), and design operation pressure in pounds per square inch (psi) for each irrigation device, ii. Sprinkler heads and other emission devises shall have matched precipitation rates. Section 19.570.030. iii. Relevant information from the soil management plan/report, such as soil type and infiltration rate, shall be noted. 			
h.	Automatice irrigation controllers utilizing either evapotranspiration, or soil moisture sensor data with non volatile memory, shall be required			
i.	Rain sensing device that automatically stops or adjusts an irrigation event during rainy weather. Additional water conservation technology may be required, where necessary, at the discretion of the Zoning Administator.			
j.	Irrigation system details for assembly and installation;			
k.	An irrigation schedule shall be developed for plant establishment, established landscape and temporarily irrigated areas. For additional information, refer to the Riverside Citywide Design Guidelines, Appendix E, Water Efficient Landscaping and Irrigation Design Guidelines.			
	AND IRRIGATION PLANS: The planting and irrigation plans shall be ame size and scale.			

j. ENVIRONMENTAL DETERMINATION:

Landscaping is categorically exempt per the California Environmental Quality Act (CEQA) pursuant to Section 15304 (b) of the CEQA Guidelines.

k. REQUIRED CORRECTIONS:

A. Revise the submitted landscape and irrigation plans and send four copies to the Community Development Department Planning Division for Staff Review, incorporating the following changes:

DESIGN STANDARDS – GENERAL

- 1. Enter WMWD's comments here (if applicable)
- 2. Enter Public Works' comments here (if applicable)
- 3. Enter any landscape and irrigation conditions of approval of all associated project cases which have not been addressed by these plans

DESIGN STANDARDS – LANDSCAPING

- 4. Revise the landscape plan to show the locations of all backflow preventers (irrigation and double detector check), gas meters, transformers, air conditioning condensers, above ground pipes and valves or any other equipment not otherwise designated for screening, and show how such equipment will be screened by landscaping. (Contact the Utilities Department for minimum clearances from transformers).
- 5. Submit for Design Review staff approval, details showing how parking areas will be screened from street views. Screening must consist of one of the following:
 - a. a 3' high landscaped berm
 - b. a 3' high shrub row
 - c. a combination of the above

Shrubbery and walls must be located toward the rear of the landscaped setback.

- 6. A minimum 12-inch concrete walkway, including curb width, shall be provided along the sides of landscape planters whenever the side of a parking stall is adjacent to it.
 - a. Revise the landscape plan to incorporate closely spaced minimum 5-gallon shrubbery in all parking lot end row planters and finger planters. Shrubbery should have a natural growth height of 18" to 36".
 - b. Specify substantial clusters of minimum 5-gallon size shrubbery at the base of all freestanding walls so as to help break the wall masses.
- 7. Incorporate substantial clusters of minimum 5-gallon size shrubbery to serve as foundation plantings at the base of all building walls.
- 8. Utilize the Public Works Department's standard tree planting and staking detail, specifying <u>DOUBLE STAKING</u> and <u>TIRE STRIP TIES</u>.
- 9. Design all property line planters so they drain away from the adjacent property. Where retaining walls are necessary for this purpose, specify block type and color to Planning staff for review.
- 10. Specify concrete mow strips between all lawn and shrub areas.
- 11. The planting of City street trees is the responsibility of the developer. Utilities and/or occupancy will be WITHHELD until street trees are installed. The Public Works Department inspects all street tree plantings and must be contacted <u>before</u> street trees are planted. Make sure the

landscape installer is aware of this and contacts the Public Works Department (951) 826-5341 at least 48 hours before street trees are planted.

DESIGN STANDARDS – IRRIGATION

- 12. Specify all sprinklers for triple swing joint riser protection.
- 13. Specify all sprinklers adjacent to walkways and automobile parking or driveway areas for "popup" heads.
- 14. Specify irrigation pipes under paved areas for placement in Schedule 40 sleeves.

II. FOLLOW-UP:

- A. Resubmit the "redline plan" and three corrected sets of plans to the case planner for further review.
- B. Before calling for a landscape and irrigation inspection, have the "Certificate of Compliance" form filled out and signed by the designer/auditor responsible for the project and submit this form to enter case planner name (see enclosed forms).
- C. Call enter case planner name at enter case planner phone number to schedule the landscape inspection at least one week prior to needing the release of utilities.
- D. Upon approval by the case planner of the revised landscape and irrigation plans, one copy of the plans will be returned to the applicant, stamped "approved." This set of plans must be used on the job site.

Document2