Small MS4 General Permit Provision E.12.J Landscape Code Gaps and Impediments Analysis Tool

State Water Board
Proposition 84 Stormwater Grant #12-421-550

California Stormwater Quality Association

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CASQA
CALIFORNIA STORMWATER QUALITY ASSOCIATION

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Central Coast Low Impact Development Initiative
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Jurisdiction Name
THE E.12.J IMPEDIMENT ANALYSIS TOOL

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Benchmark / Objective	Code Reference and Summary of Existing Standards	Gap Between Existing Standard and Benchmark / Opportunity to Improve
(1) VEGETATION CONSERVATION		
(a) Do regulations require or encourage the preservation of natural vegetation at development sites? *(Center for Watershed Protection, 1998)* 		
(b) If forests or specimen trees are present at development sites, must some of the stand be preserved? *(Center for Watershed Protection, 1998)*		
(c) If there is a stream buffer ordinance in the municipality, does the ordinance specify that at least part of the stream buffer be maintained with native vegetation? *(Center for Watershed Protection, 1998)*		

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(2) OPEN SPACE MANAGEMENT		
(a) Are mechanisms in place to manage open space in perpetuity?		
(b) Are open space areas required to be consolidated into larger units? *(Center for Watershed Protection, 1998)*		
(c) Does a minimum percentage of open space have to be managed in a natural condition? *(Center for Watershed Protection, 1998)*		
(d) Are allowed uses in open space areas of residential developments defined? *(Center for Watershed Protection, 1998)*		
(e) Can open space be managed by a third party using land trusts or conservation easements? *(Center for Watershed Protection, 1998)*		
(3) ROOFTOP RUNOFF		
(a) Can rooftop runoff be discharged to yard areas? *(Center for Watershed Protection, 1998)*		

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(b) Do current grading or drainage requirements allow for temporary ponding of stormwater on front yards or rooftops? *(Center for Watershed Protection, 1998)* 		
(c) Are vegetated roofs allowed? Do criteria exist to allow designers to receive credit for landscaping, stormwater, etc. for the use of vegetated roofs?		
(4) OPEN SPACE / CLUSTER DESIGN REQUIREMENTS		
(a) Does your municipality have open space/cluster design regulations? *(Center for Watershed Protection, 1998)* 		

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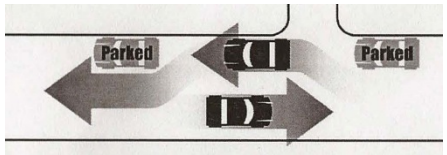
(b) Is land conservation or impervious cover reduction a major goal or objective of the open space/cluster design regulations? *(Center for Watershed Protection, 1998)*		
(c) Are the entitlement criteria for open space/cluster design more stringent than for standard subdivision design?		
(d) Are flexible site design criteria available for developers that utilize open space/cluster design options (setbacks, road widths, lot sized)? *(Center for Watershed Protection, 1998)*		
(5) STREET WIDTH		
(a) Is the minimum pavement width allowed for streets in low density residential developments that have less than 500 daily trips (ADT) between 18 and 22 feet? *(Center for Watershed Protection, 1998)*		
(b) At higher densities, are parking lanes also allowed to serve as traffic lanes? *(Center for Watershed Protection, 1998)*		
(c) Is a single, shared travel lane to serve traffic flowing in both directions permitted in low volume single family residential neighborhoods? 		
(6) STREET LENGTH		
(a) Do street layout standards promote the most efficient street layouts that reduce overall street lengths and impervious surfaces? *(Center for Watershed Protection, 1998)*		

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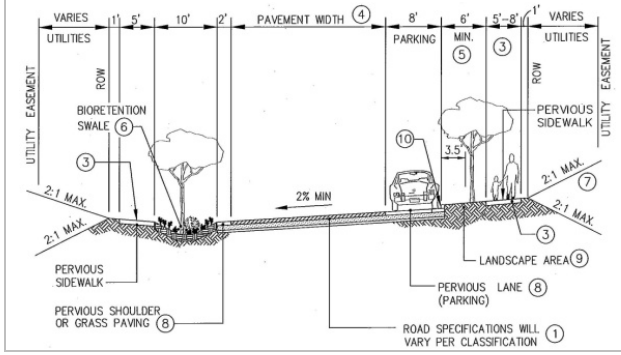
(7) RIGHT OF WAY USE		
(a) Does code allow for utilities to be placed under paved section of the ROW? *(Center for Watershed Protection, 1998)*		
(8) CUL-DE-SACS		
(a) Does the minimum allowable cul-de-sac radius exceed 35 feet? Is the minimum radius greater than 45 feet? *(Center for Watershed Protection, 1998)*		
(b) Do adopted street sections allow for open treatment and conveyance of stormwater within landscape strips?  		

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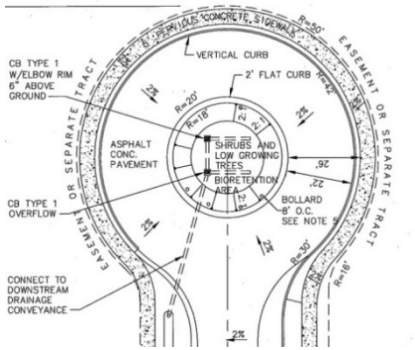
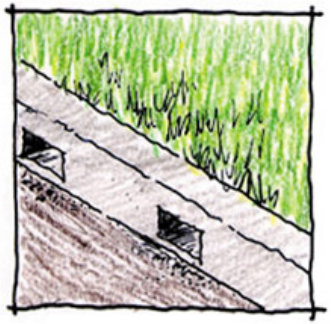
(c) Can a landscape island be created within the cul-de-sac? *(Center for Watershed Protection, 1998)* 		
(9) STREET-SIDE BIORETENTION		
(a) Are curb and gutters required for most residential street sections? *(Center for Watershed Protection, 1998)* 		

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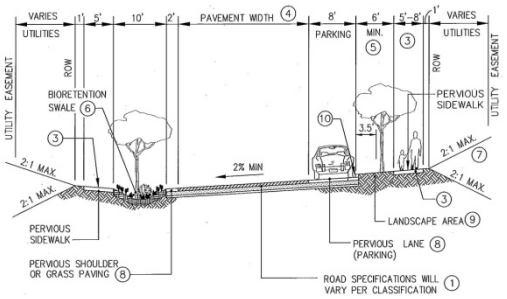
Benchmark / Objective	Code Reference and Summary of Existing Standards	Gap Between Existing Standard and Benchmark / Opportunity to Improve
(b) Do adopted street sections allow for the use of open treatment and conveyance of stormwater within landscape strips? 		
(10) LAND CONSERVATION INCENTIVES		
(a) Are there any incentives for developers or landowners to conserve non-regulated land (e.g., open space designs, density bonuses, stormwater credits, etc.)? *(Center for Watershed Protection, 1998)*		
(b) Is flexibility to meet regulatory or conservation restrictions (e.g., density compensation, buffer averaging, transferable development rights, offsite mitigation, etc.) offered to developers? *(Center for Watershed Protection, 1998)*		
(11) STRUCTURED PARKING		
(a) Are there any incentives for developers to provide parking within garages rather than surface parking lots? *(Center for Watershed Protection, 1998)*		
(12) PARKING RATIOS		
(a) Do maximum parking standards exist in addition to minimum standards?		

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(b) Is the minimum parking ratio for single family homes (per home) less than or equal to 2 spaces? *(Center for Watershed Protection, 1998)*		
(c) Is the minimum parking ratio for a professional office building (per 1,000 sf of gross floor area) less than 3 spaces? *(Center for Watershed Protection, 1998)*		
(d) Is the minimum required parking ratio for shopping center (per 1,000 sf gross floor area) less than 4.5 spaces? *(Center for Watershed Protection, 1998)*		
(13) PARKING CODES		
(a) Are model shared parking agreements provided? *(Center for Watershed Protection, 1998)*		
(b) Are parking ratios reduced if shared parking arrangements are in place? *(Center for Watershed Protection, 1998)*		
(c) If mass transit is provided nearby, may the parking ratio reduced? *(Center for Watershed Protection, 1998)*		
(14) PARKING LOT RUNOFF		
(a) Is a minimum percentage of a parking lot required to be landscaped? *(Center for Watershed Protection, 1998)*		

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(b) Is the use of bioretention islands and other stormwater practices within landscaped areas and/or setbacks allowed? *(Center for Watershed Protection, 1998)* 		
(15) PARKING LOTS		
(a) Is the minimum stall width for a standard parking space less than 9 feet? *(Center for Watershed Protection, 1998)*		
(b) Is the minimum stall length for a standard parking space less than 18 feet? *(Center for Watershed Protection, 1998)*		
(c) Does your code allow compact parking spaces?		
(d) Are at least 30% of the spaces in parking lots permitted to be designed as compact parking spaces?		
(e) Can pervious materials be used for parking areas? *(Center for Watershed Protection, 1998)*		

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(16) DRIVEWAYS		
(a) Is the minimum driveway width of a one-lane driveway 9 feet or less? Is the minimum width for a two-lane driveway 18 feet or less? *(Center for Watershed Protection, 1998)*		
(b) Can pervious materials be used for single family home driveways? *(Center for Watershed Protection, 1998)*		
(c) Can a "two track" or "Hollywood driveway" design be used for single family driveways? *(Center for Watershed Protection, 1998)*		
(d) Are shared driveways permitted in residential developments? *(Center for Watershed Protection, 1998)*		
(17) SIDEWALKS		
(a) Can sidewalks be as narrow as 4 feet? *(Center for Watershed Protection, 1998)*		
(b) Are sidewalks required on both sides of residential streets? *(Center for Watershed Protection, 1998)*		
(c) Can sidewalks be made from pervious materials?		
(18) BUFFER SYSTEMS		
(a) Is there a stream buffer ordinance in the community? *(Center for Watershed Protection, 1998)*		
(b) Is expansion of the buffer to include freshwater wetlands, steep slopes or the 100-year floodplain required? *(Center for Watershed Protection, 1998)*		

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(c) Does the stream buffer ordinance specify that at least part of the stream buffer be maintained with native vegetation? *(Center for Watershed Protection, 1998)*		
(d) Does the stream buffer ordinance outline allowable uses? *(Center for Watershed Protection, 1998)*		
(e) Does the ordinance specify enforcement and education mechanisms? *(Center for Watershed Protection, 1998)*		
(19) SETBACKS AND FRONTAGES		
(a) Are irregular lots shapes (pie-shaped, flag lots) allowed in the community? *(Center for Watershed Protection, 1998)*		
(b) Is the minimum requirement for front setback in residential zones less than or equal to 20 feet? *(Center for Watershed Protection, 1998)*		
(c) Is the minimum requirement for rear setback in residential zones less than or equal to 25 feet? *(Center for Watershed Protection, 1998)*		
(d) Is the minimum requirement for side setback in residential zones less than or equal to 8 feet? *(Center for Watershed Protection, 1998)*		
(e) Is the minimum lot frontage in residential zones less than or equal to 60 feet?		
(20) STORMWATER OUTFALLS		
(a) Can stormwater be directly discharged into jurisdictional wetland without pretreatment? *(Center for Watershed Protection, 1998)*		

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(b) Does a floodplain management ordinance that restricts or prohibits development within the 100-year floodplain exist? *(Center for Watershed Protection, 1998)*		
(c) Is stormwater required to be treated before it is discharged? *(Center for Watershed Protection, 1998)*		
(d) Are there effective design criteria for stormwater best management practices? *(Center for Watershed Protection, 1998)*		
(21) POTENTIAL THRESHOLDS		
(a) Are there reviewable methods of determining and inspecting compliance with water quality standards?		
(b) Have hydromodification standards been adopted?		
(c) Does the hydromodification control standard require the management of runoff generated from the site's impervious areas be contained on site?		
(d) Are runoff controls clearly specified?		
(e) Are mandatory source control measures defined?		
(f) Do drainage policies, standards and details allow for infiltration of stormwater or separation of directly-connected impervious areas?		
(g) If stormwater management is required, which redevelopment projects are required to meet the standard? What are the applicability thresholds for other development types?		
(h) Is there a maximum impervious area for specific land uses or zones?		

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(i) Are "end of the pipe" facilities (proprietary stormwater quality treatment devices) allowed to be installed as stand-alone treatment?		
(j) Do databases exist which can send out inspection reminders for the long-term maintenance of stormwater BMPs?		
(k) Is a stormwater pollution prevention plan or other permit required as a condition of development?		
(l) Are maintenance agreement templates for stormwater quality facilities included in your engineering standards?		
(22) OTHER		
(a) Is stormwater quality a topic of the pre-applicant conference? Is a representative knowledgeable in stormwater obliged to attend? Is a stormwater management plan required as part of the preliminary plan review process?		
(b) Do applicants' CEQA Initial Studies include analyses of the potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas.		

Gap Analysis Framework prepared from the following sources:

- Alameda Countywide Clean Water Program. (2013). C.3 Stormwater Technical Guidance: A handbook for developers, builders and project applicants. Version 4.0. https://www.cleanwaterprogram.org/c3-guidance-table.html
- Carlson, Wayne E., Medrud, Brad, Wulkan, Bruce & Holly Williams. (2012). Integrating LID into Local Codes: A Guidebook for Local Governments. Olympia, WA: Puget Sound Partnership. http://www.psp.wa.gov/downloads/LID_Guidebook/20120731_LIDguidebook.pdf
- Center for Watershed Protection. (1998). Codes and Ordinances Worksheet. Ellicott City, MD. https://owl.cwp.org/mdocs-posts/codes-ordinace-worksheet/
- Santa Clara Valley Urban Runoff Pollution Prevention Program. (July 9, 2003). Site Design Guidance for Review of Local Standards. Sunnyvale, CA. http://www.scvurppp-w2k.com/permit_c3_docs/071103_Site_Design_Guidance_for_Review_of_Local_Standards.pdf

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