

Adaptation of Contra Costa Sizing Calculator to San Diego and Design Examples

May 28, 2009

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Presentation Objectives

Objective:

- Compile feature list for San Diego BMP Sizing Tool features by illustrating previous BC work (Contra Costa) and incorporating local approach

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Presentation Outline

Outline:

- Discussion of automated sizing tool features
- LID-based example
- Mixed LID and pond example

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Benefits of Automated Sizing Tool

- Facilities are sized properly and function as intended
- Greater transparency between project proponents, municipal review staff
- Simplified, faster process of stormwater control

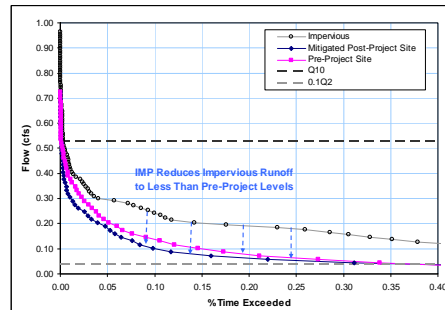
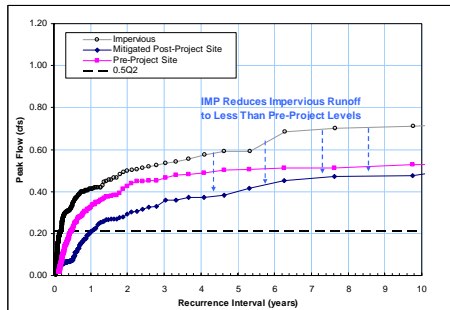
Parameter	Minimum	Actual
Bioretention Area (sq ft)	0	0
Cistern Volume (cubic ft)	0	0
Cistern Height (ft)		0.00

Contra Costa HMP: IMP Sizing Calculator

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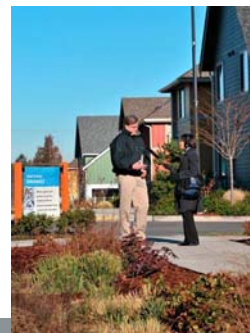
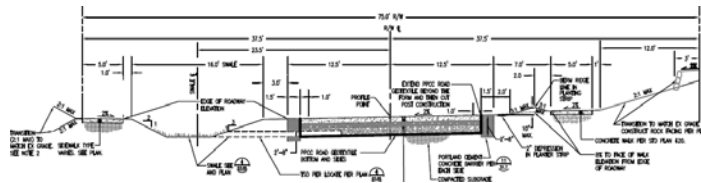
How Sizing Factors Were Developed

- Contra Costa tool “pre-sizes” LID facilities based on land use, soils, local rainfall
- Computes sizing factors:
$$\frac{\text{Footprint}}{\text{Impervious Area}}$$



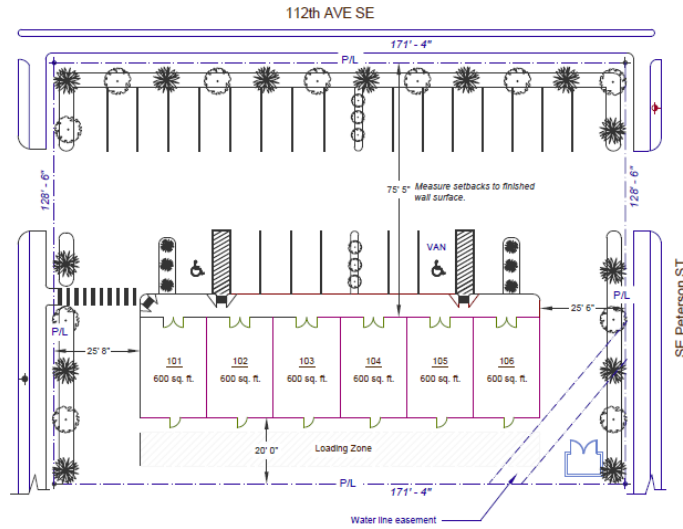
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Example Stormwater BMPs



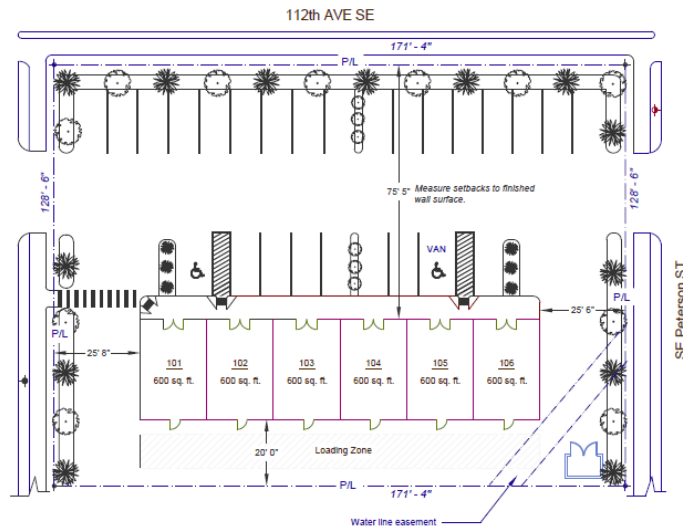
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Example #1: Integrate Sizing Tool into Site Design



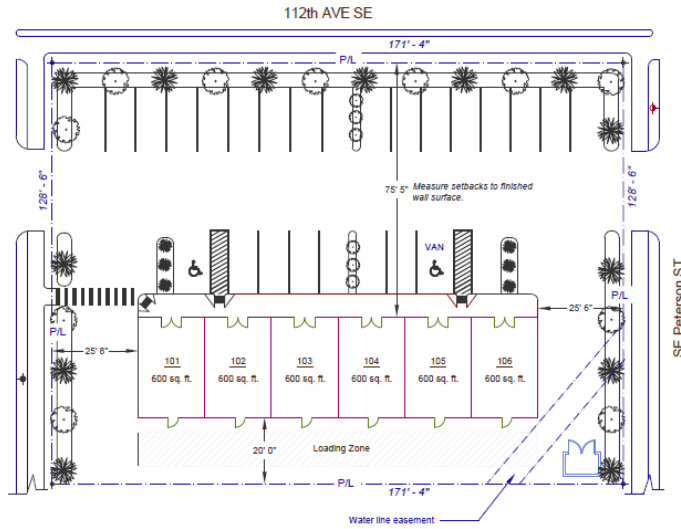
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Example #2



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Example #3



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Example #4: Combined LID and Stormwater Pond Approach



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