

Central Coast Region Stormwater Control Measure Sizing Calculator

1. Project Information

Project name:	Anthem Chapel	
Project location:	Goleta, CA	
Tier 2/Tier 3:		Tier 3 - Retention
Design rainfall depth (in):		2.3
Total project area (ft2):		91590
Total DMA area (ft2):		87726
Total new impervious area (ft2):		48104
Total replaced impervious within a USA (ft2):		0
Total replaced impervious not in a USA (ft2):		0
Total pervious/landscape area (ft2):		39622
Total SCM area (ft2):		3864

2. DMA Characterization

Name	DMA Type	Area (ft2)	Surface Type	New, Replaced?	Connection
DMA 1A - impervious	Drains to SCM	15823	Roof	New	SCM1
DMA 1B - landscape	Drains to SCM	9370	Landscape	New	SCM 1
DMA 1C - perm. paver	Drains to SCM	1367	Open/porous pavers	New	SCM 1
DMA 2B- landscape	Self-Treating	4320			
DMA 3A - impervious	Drains to Self-Retaining	7500	Concrete or asphalt		DMA 3C - perm. Paver
DMA 3B - landscape	Self-Treating	75			
DMA 3C - perm. Paver	Self-Retaining	5338			
DMA 4B - landscape	Self-Treating	1395			
DMA 5A - impervious	Drains to Self-Retaining	4590	Concrete or asphalt		DMA 5C - perm. Paver
DMA 5B - landscape	Self-Treating	755			
DMA 5C - perm. Paver	Self-Retaining	2540			
DMA 6A - impervious	Drains to Self-Retaining	9830	Concrete or asphalt		DMA 6C - perm. Pavers
DMA 6B - landscape	Self-Treating	880			
DMA 6C - perm. Pavers	Self-Retaining	3461			
DMA 7A - impervious	Drains to SCM	1460	Concrete or asphalt	New	SCM 2
DMA 7B - landscape	Drains to SCM	0	Landscape	New	
DMA 8A - impervious	Drains to Self-Retaining	3841	Concrete or asphalt		DMA 8C - perm. Pavers
DMA 8B - landscape	Self-Treating	455			
DMA 8C - perm. Pavers	Self-Retaining	3716			
DMA 9A - impervious	Drains to Self-Retaining	210	Concrete or asphalt		DMA 9B - landscape
DMA 9B - landscape	Self-Retaining	1270			
DMA 10A - impervious	Drains to SCM	1250	Concrete or asphalt	New	SCM 2
DMA 11A - impervious	Drains to Self-Retaining	80	Concrete or asphalt		DMA 11B - landscape
DMA 11B - landscape	Self-Treating	1305			
DMA 12A - impervious	Drains to Self-Retaining	3140	Concrete or asphalt		DMA 12C - impervious
DMA 12B - landscape	Self-Treating	220			
DMA 12C - perm. Paver	Self-Retaining	1325			
DMA 13A - impervious	Drains to SCM	380	Concrete or asphalt	New	SCM 2
DMA 13B - landscape	Drains to SCM	940	Landscape	New	SCM 2
DMA 14B - landscape	Self-Treating	890			

DMA Summary Area

Total assigned DMA area (ft2):	87726
New impervious area (ft2):	48104
Replaced impervious within a USA (ft2):	0

Replaced impervious not in a USA (ft2):	0
Total pervious/landscape area (ft2):	39622

3. SCM Characterization

Name	SCM Type	Safety Factor	SCM Soil Type	Infilt. Rate (in/hr)	Area (ft2)
SCM 1	Bioretention	1	HSG C/D	0.25	3484
SCM 2	Bioretention	1	HSG C/D	0.25	380

4. Run SBUH Model

5. SCM Minimum Sizing Requirements

SCM Name	Min. Required Storage Vol. (ft3)	Depth Below Underdrain (ft)	Drain Time (hours)	Orifice Diameter (in)
SCM 1	1394	1.00	0.0	
SCM 2	526	3.46	55.4	

6. Self-Retaining Area Sizing Checks

Self-Retaining DMA Name	Self-Retaining DMA Area (ft2)	Tributary DMA Name(s)	Eff. Tributary DMA Area (ft2)	Effective Tributary / SRA Area Ratio	
DMA 3C - perm. Paver	5338	DMA 3A - impervious	7500	1.41	
DMA 5C - perm. Paver	2540	DMA 5A - impervious	4590	1.81	
DMA 6C - perm. Pavers	3461	DMA 6A - impervious	9830	2.84	Ratio is too large.
DMA 8C - perm. Pavers	3716	DMA 8A - impervious	3841	1.03	
DMA 9B - landscape	1270	DMA 9A - impervious	210	0.17	
DMA 12C - impervious	1325	DMA 12A - impervious	3140	2.37	Ratio is too large.