



**LEGEND**

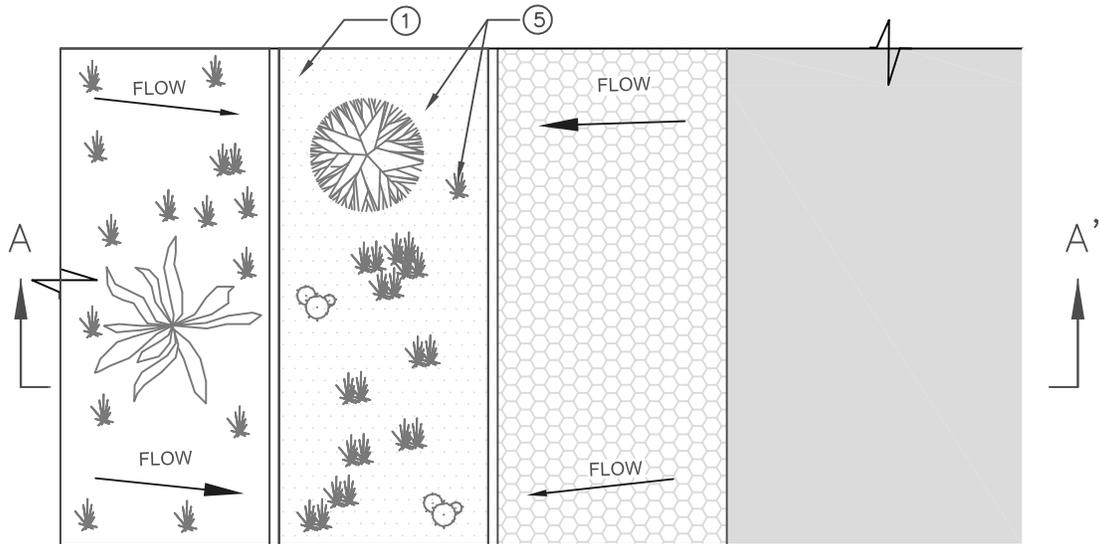
- Private Storm Drain
- Caltrans Storm Drain
- City Storm Drain
- Drain Inlet
- Drain Outfall
- Area of Bioretention Cells
- Area of Irrigated Vegetation

600 ft

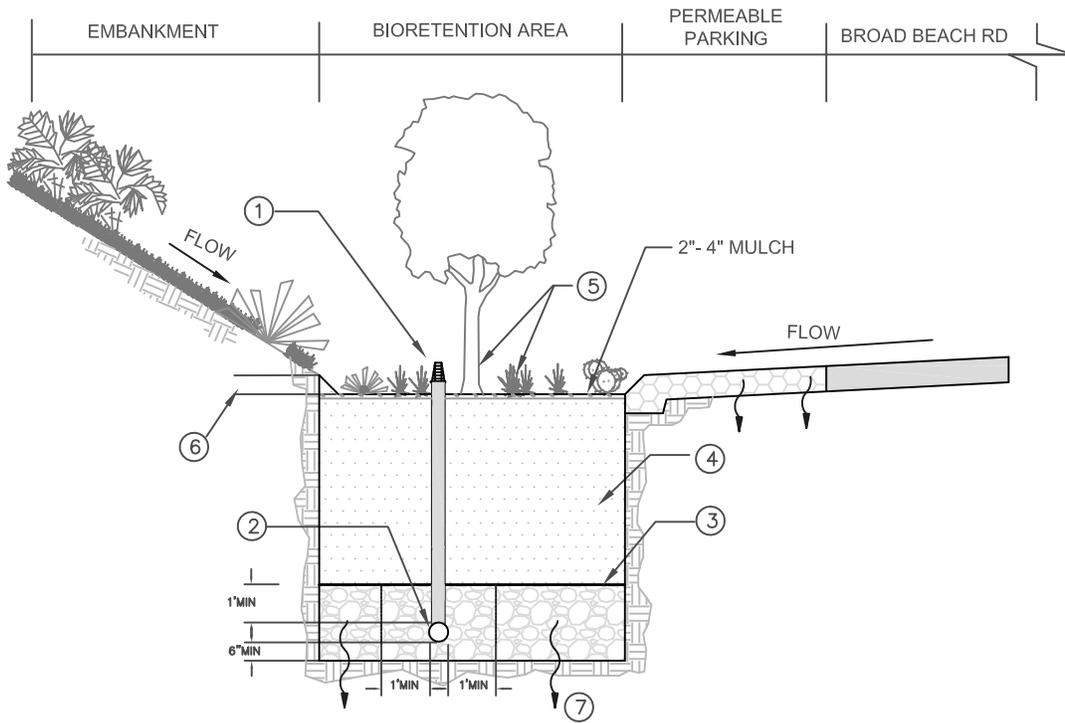
**Broad Beach Road Project Area**



**Current Condition - Broad Beach Road, Malibu**



**Plan View**  
(Not to Scale)



**Section A-A'**  
(Not to Scale)

**NOTES**

- ① OVERFLOW DEVICE; OPTION 1 - VERTICAL RISER, OPTION 2 - PEA GRAVEL CURTAIN DRAIN, OPTION 3 - FLOW SPREADER.
- ② PERFORATED PIPE UNDERDRAIN SYSTEM (AS NEEDED). FOR INCREASED VOLUME REDUCTION WHERE SOIL CONDITIONS ALLOW, OMIT THE PERFORATED UNDERDRAIN OR RAISE THE PERFORATED UNDERDRAIN TO THE TOP OF THE GRAVEL STORAGE LAYER AND INSTALL AN APPROPRIATELY SIZED GRAVEL DRAINAGE LAYER (TYPICALLY A WASHED 57 STONE) BENEATH THE BIORETENTION AREA TO ACHIEVE DESIRED VOLUME REDUCTION GOALS. THE BASE OF THE DRAINAGE LAYER SHOULD BE FLAT WITH ZERO SLOPE. THE PLANTING MIX AND GRAVEL LAYERS SHOULD BE SEPARATED WITH A GEOTEXTILE FILTER FABRIC OR A THIN, 2- TO 4-INCH LAYER (NOMINALLY 2 INCHES) OF CHOKING STONE (SUCH AS #8).
- ③ OPTIONAL GEOTEXTILE FABRIC OR CHOKING STONE LAYER.
- ④ 2' MIN PLANTING MIX; 3' PREFERRED.
- ⑤ VEGETATION.
- ⑥ 18" MAX PONDING DEPTH.
- ⑦ INFILTRATION.



**Geosyntec**  
consultants

Figure 1  
BIORETENTION