



ocean friendly

DOUGLAS KENT

gardens

conservation, permeability, retention

Douglas Kent & Associa

ocean friendly

CPR

gardens

conservation, permeability, retention

**CONSERVATION**

**PERMEABILITY**

**RETENTION**

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GOALS

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**RUN-OFF IS EITHER  
*STOPPED*  
OR  
*CLEANED***

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OVERVIEW

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## Conservation

Plants

Fertilizers

## Permeability

Permeable Surfaces

Contours

## Retention

Above ground

Below ground

Screening and Cleaning Runoff

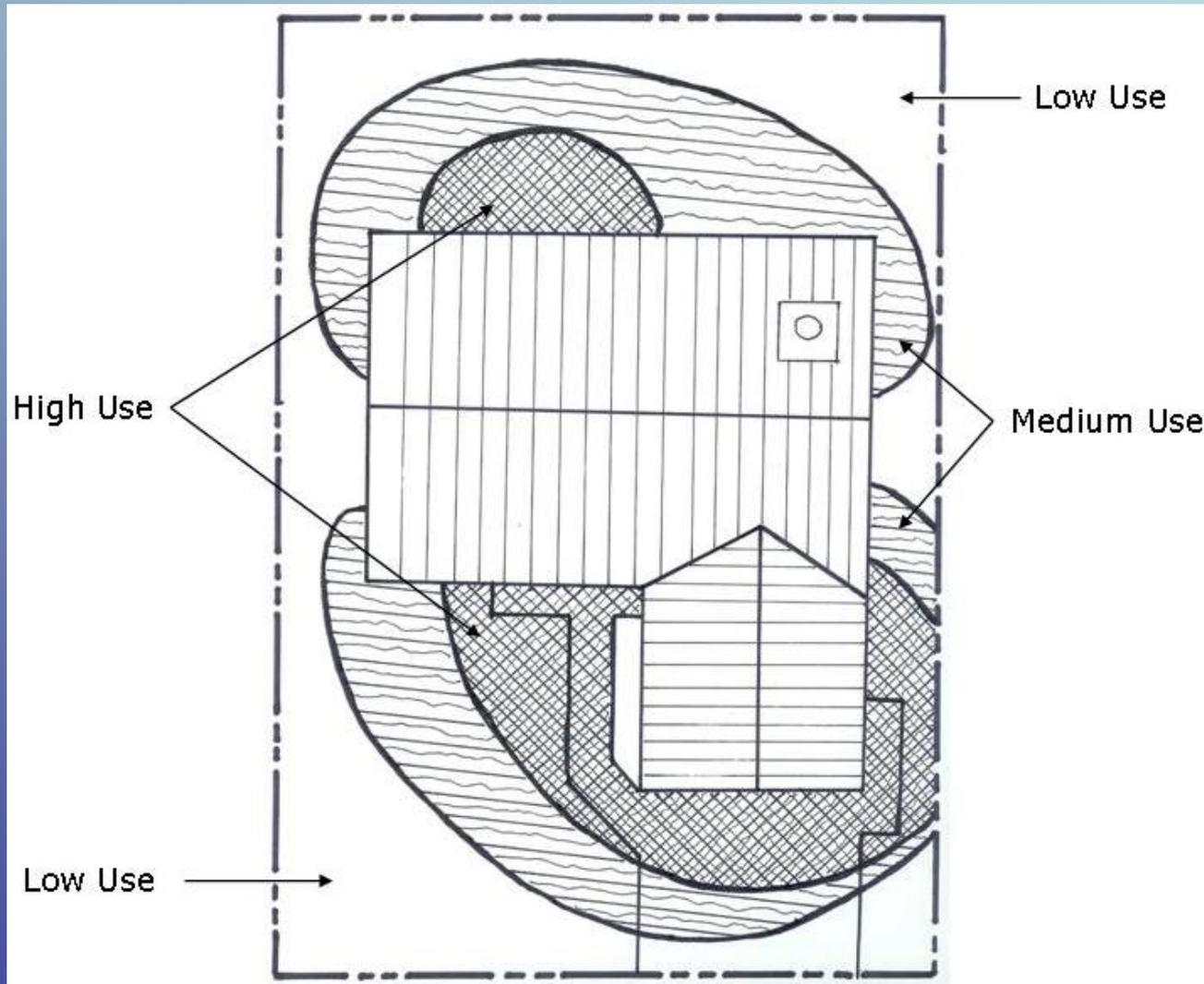
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DESIGNING

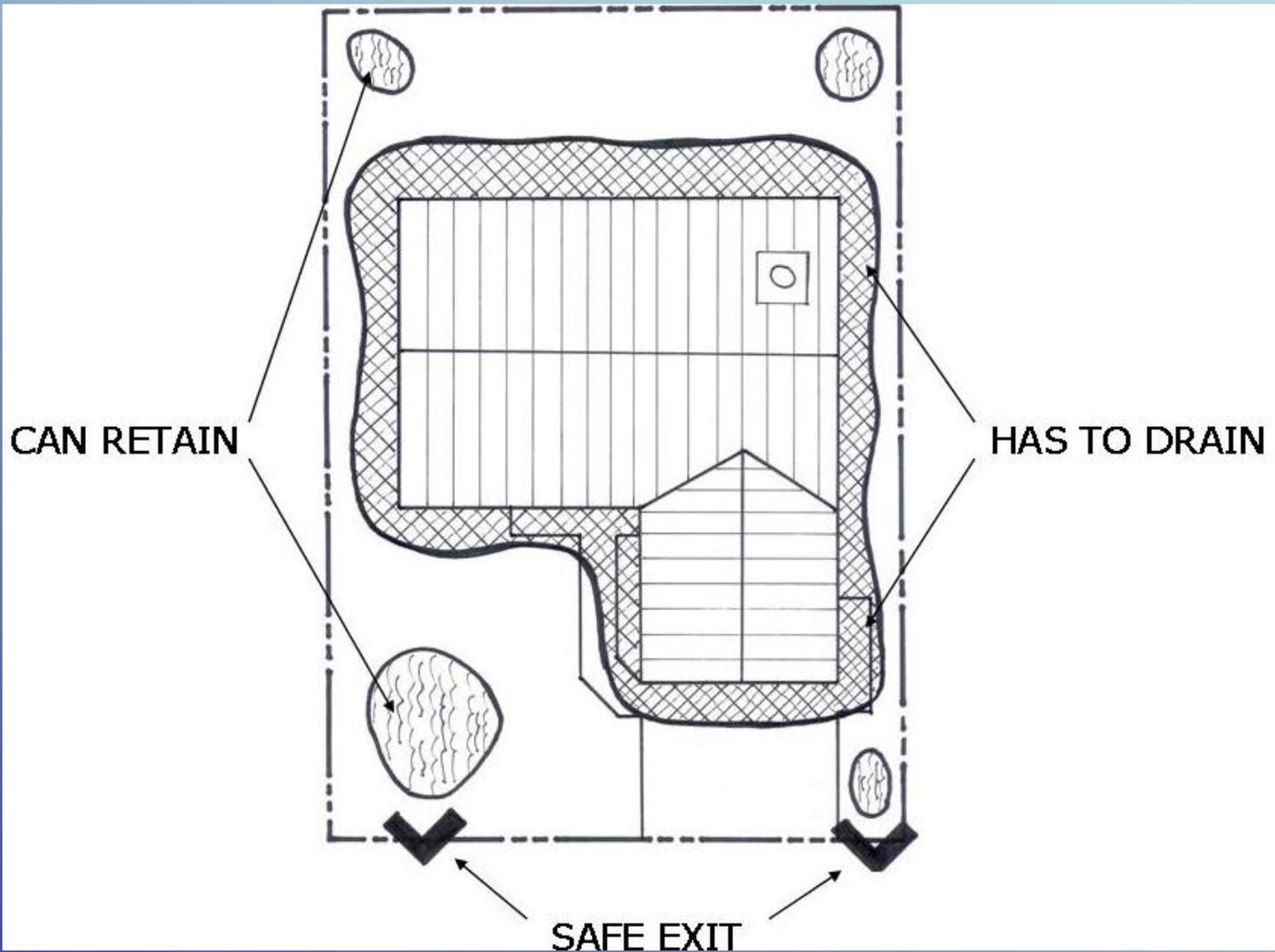
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conservation, permeability, retention

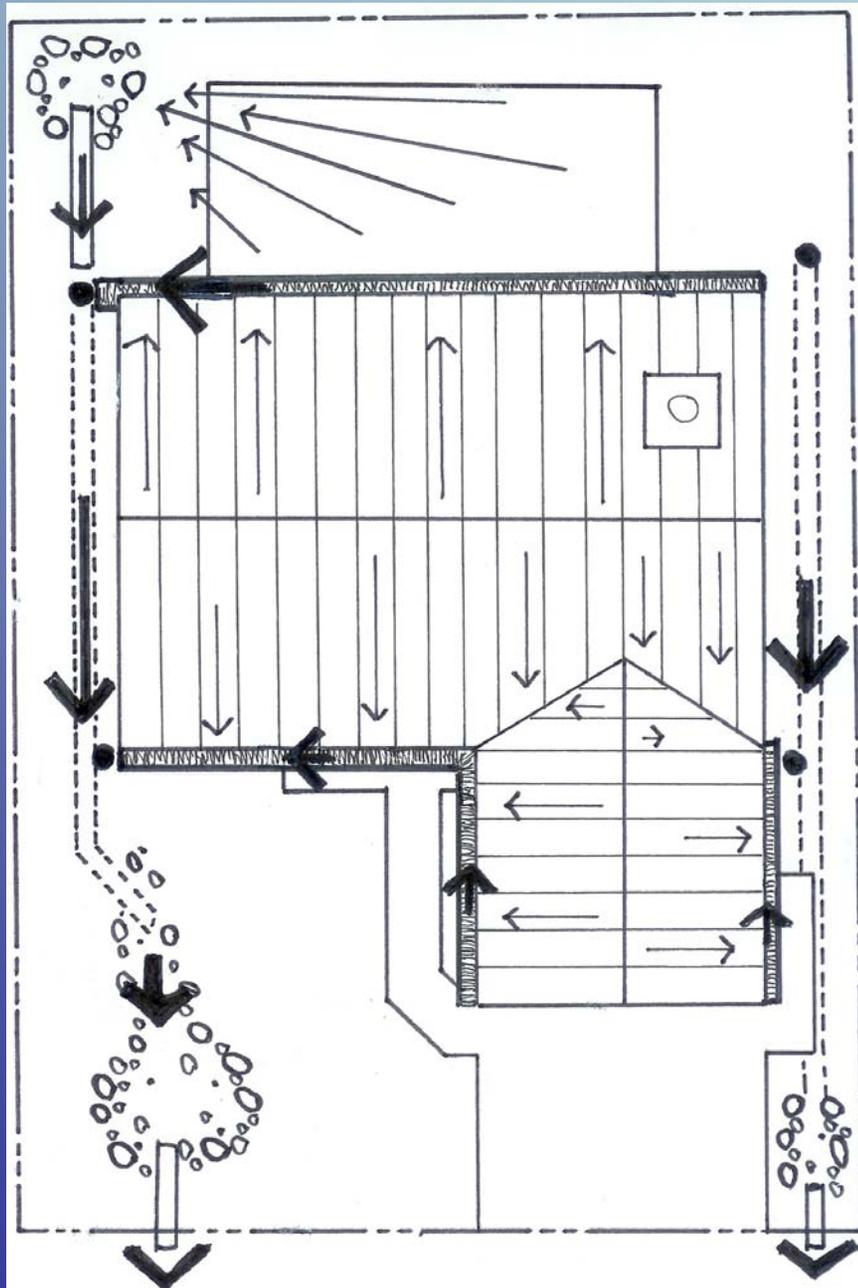
- Identify Function / Needs
- Identify the Three Areas
- Establish Paths for Water



FUNCTION



The Three Areas



## WATER PATHS

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CONSERVATION

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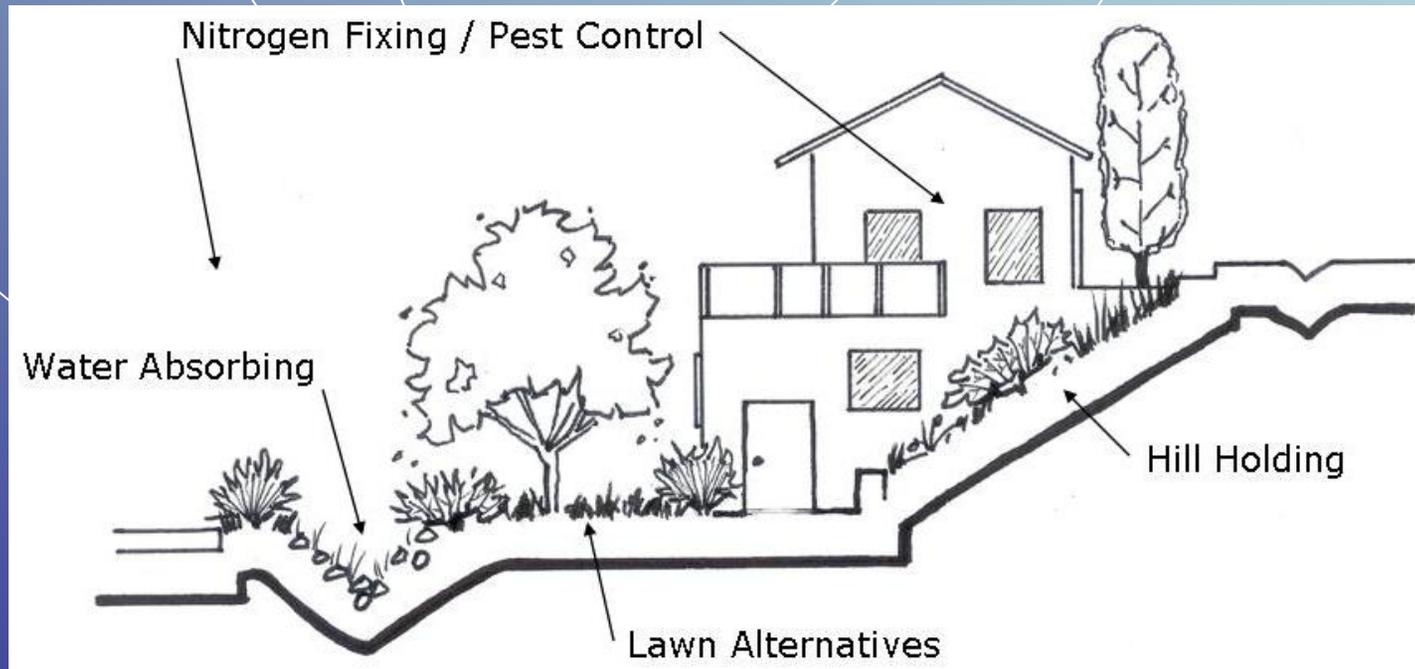
- Plants
- Fertilizers

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CONSERVATION – PLANTS

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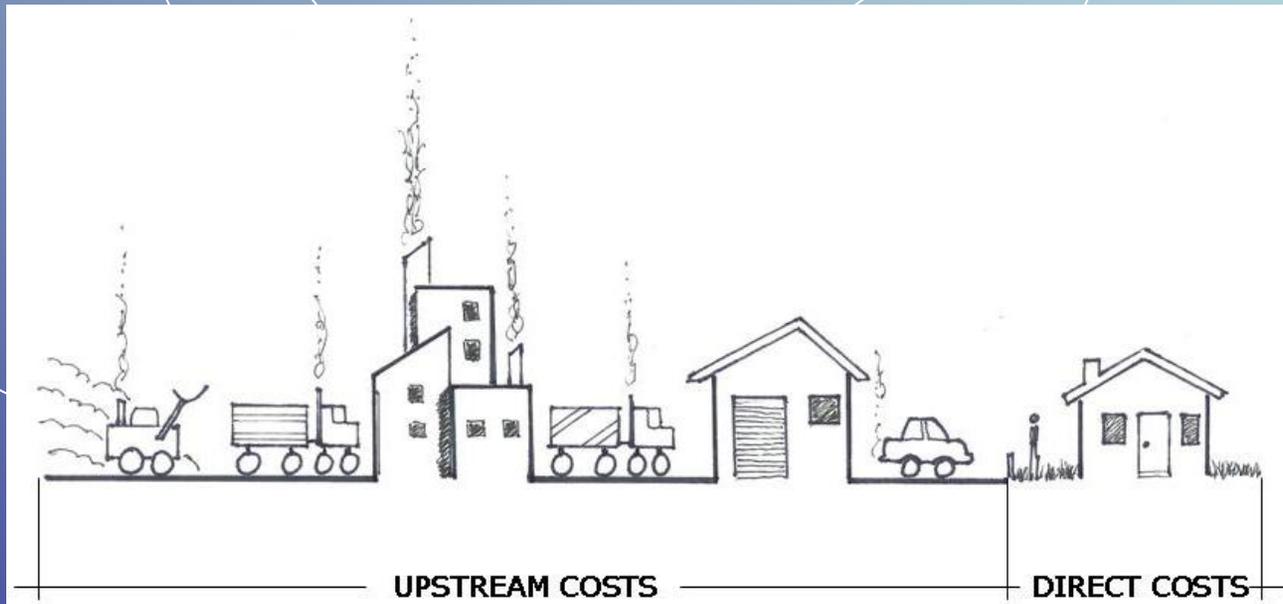


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CONSERVATION – FERTILIZERS

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Store Bought versus Home Made

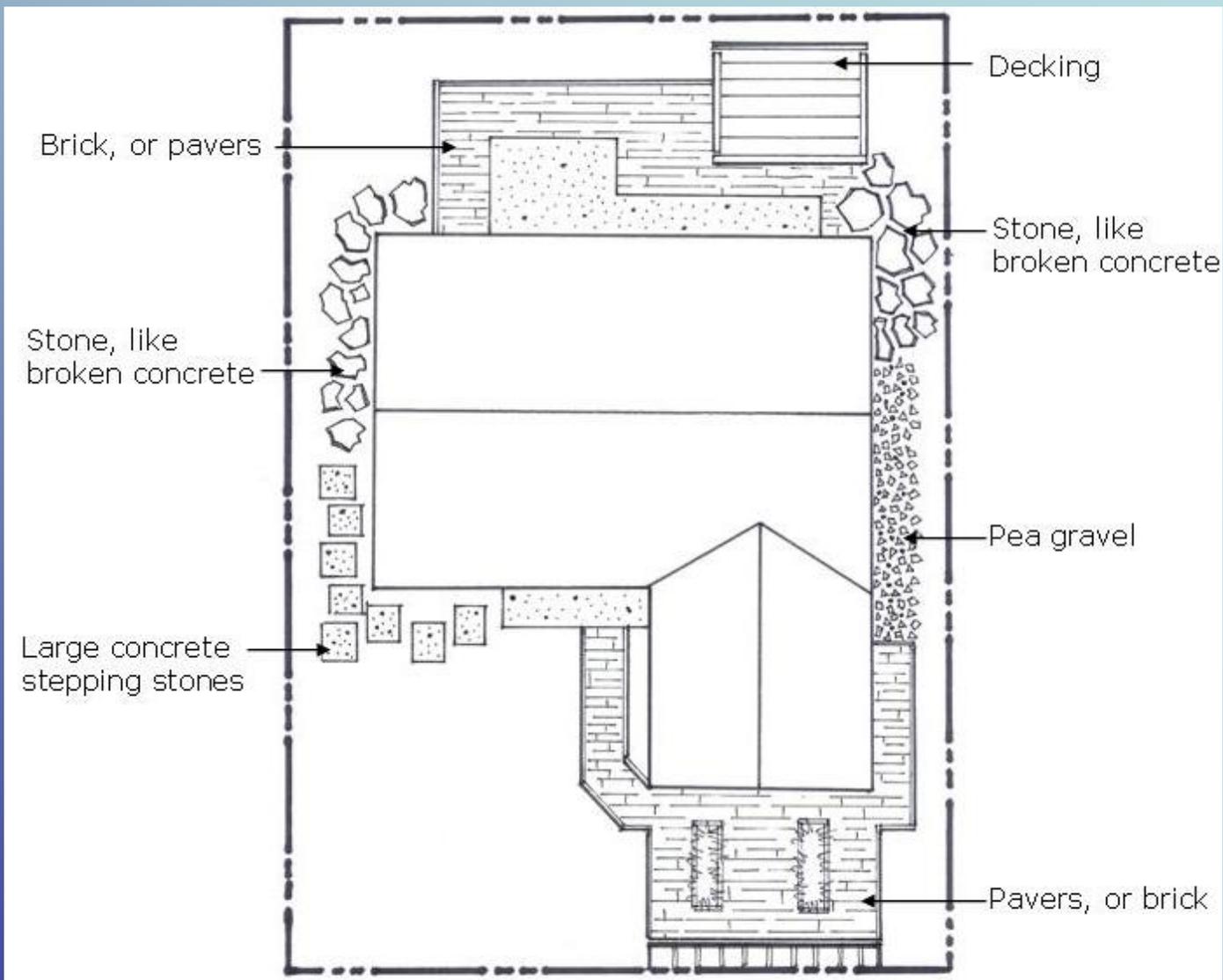
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PERMEABILITY

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- Oil and Driveways
- Surface Alternatives
- Overcoming Compacted Soils



Alternatives to Impermeable Surfaces

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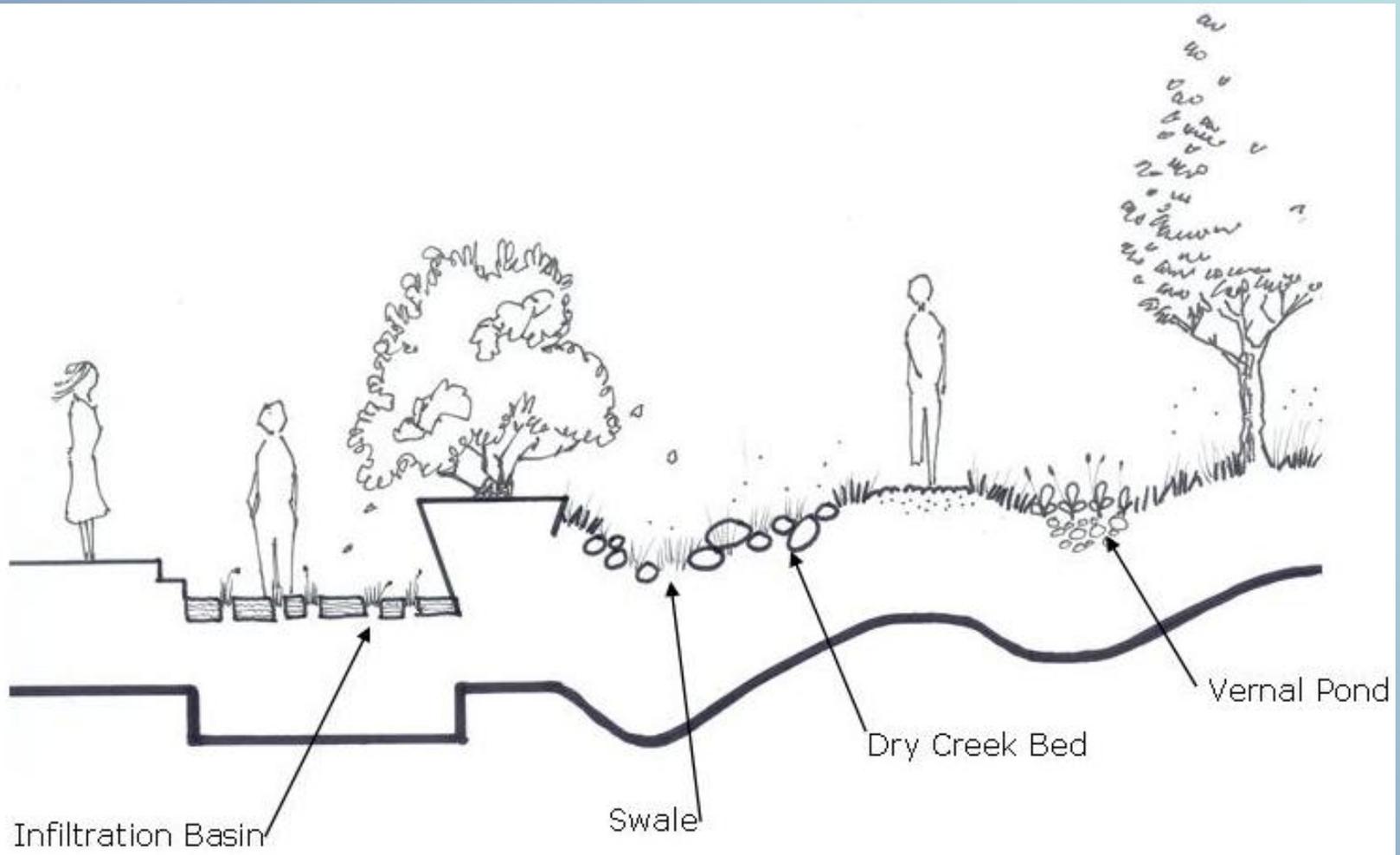
RETENTION

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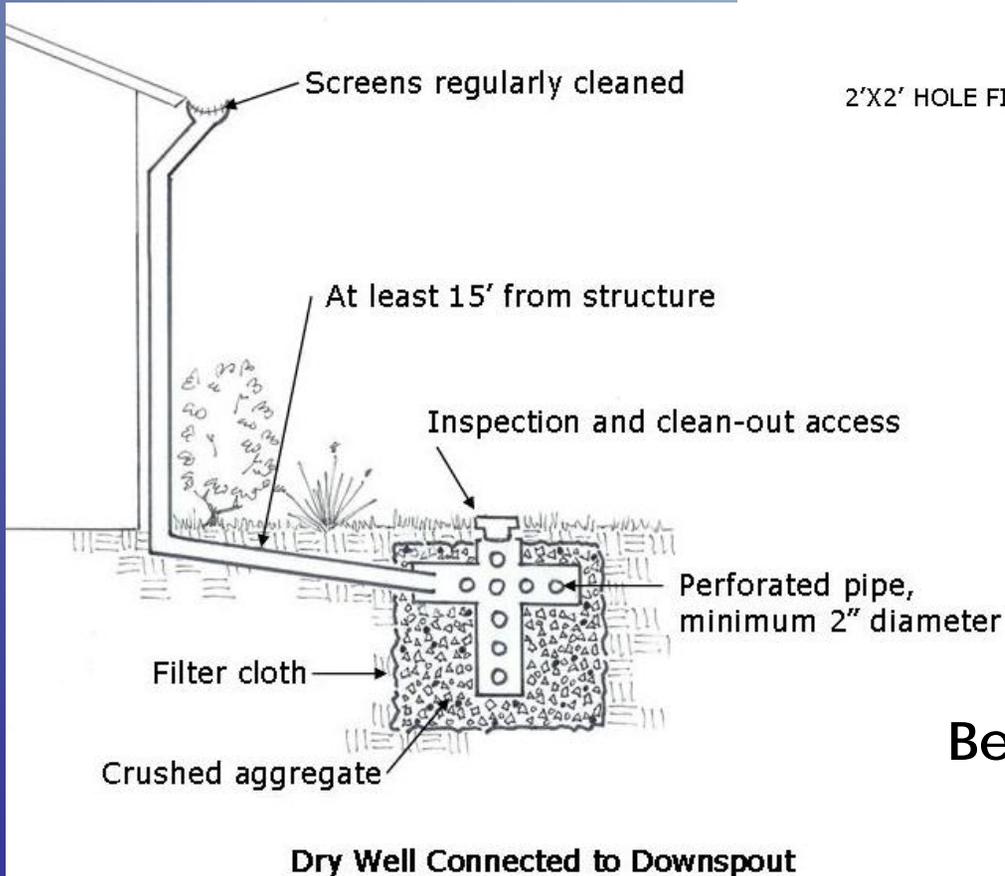
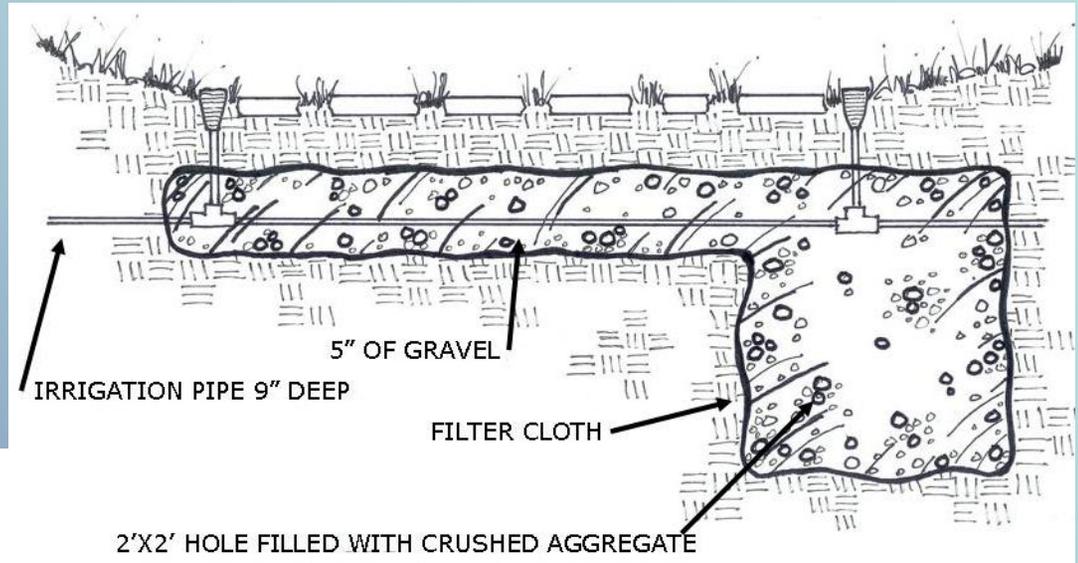
conservation, permeability, retention

**Above Ground**

**Below Ground**



**Above Ground Retention Devices**



## Below Ground Infiltration Devices

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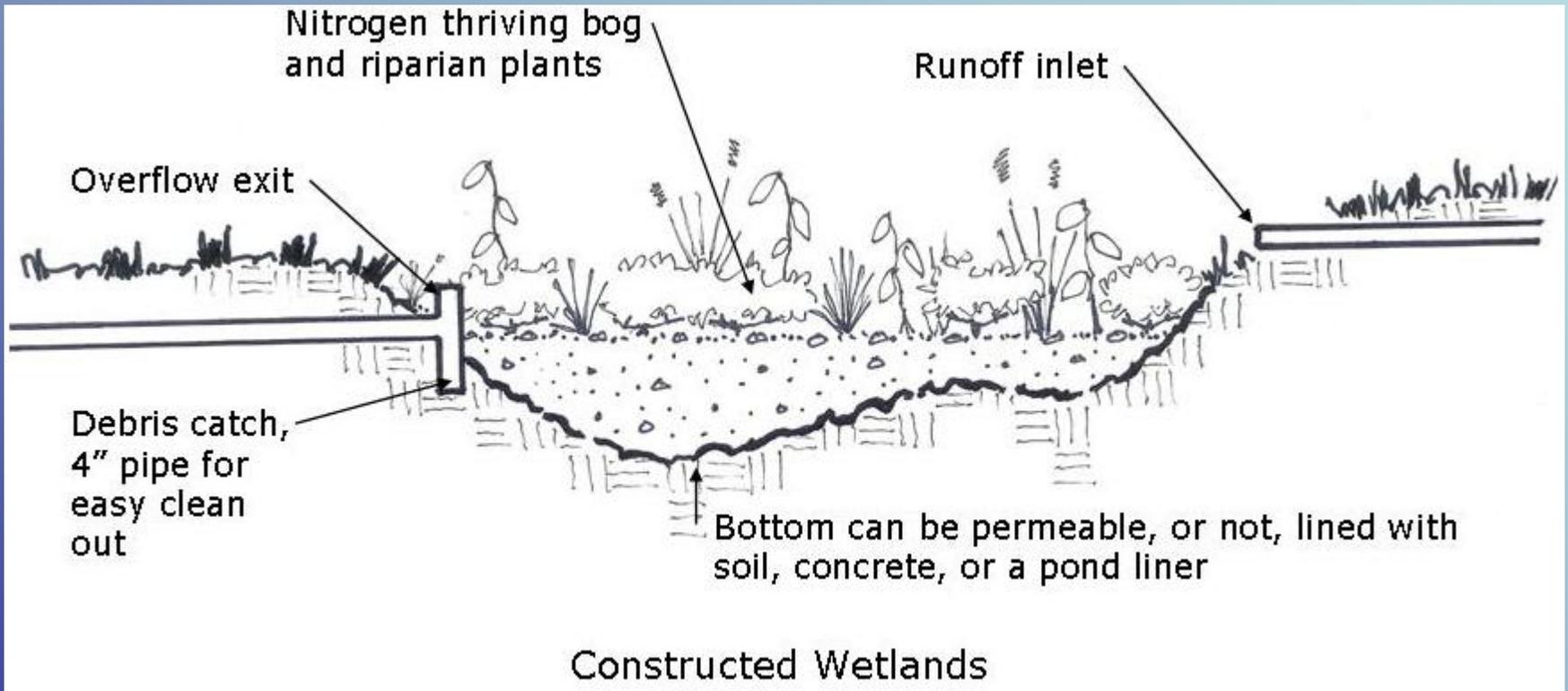
SCREENING AND CLEANING RUNOFF

conservation, permeability, retention

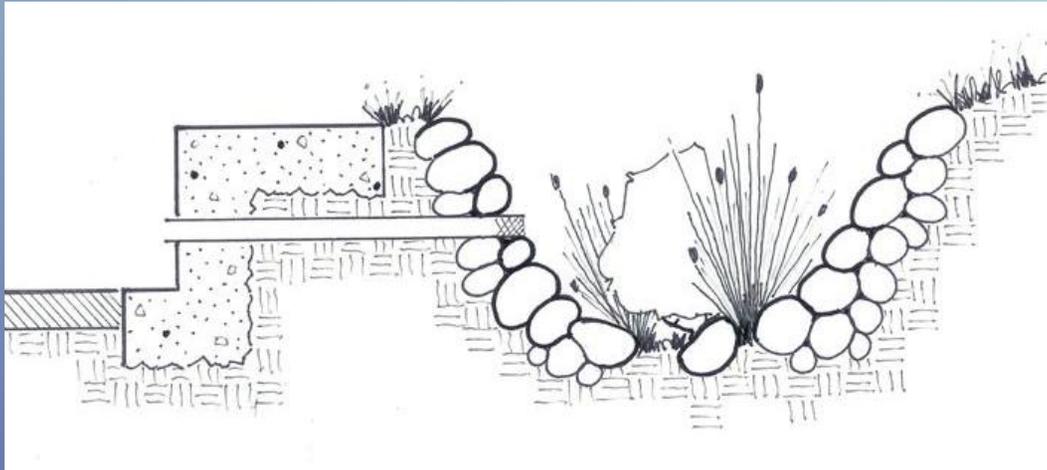
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**BIOLOGICAL**

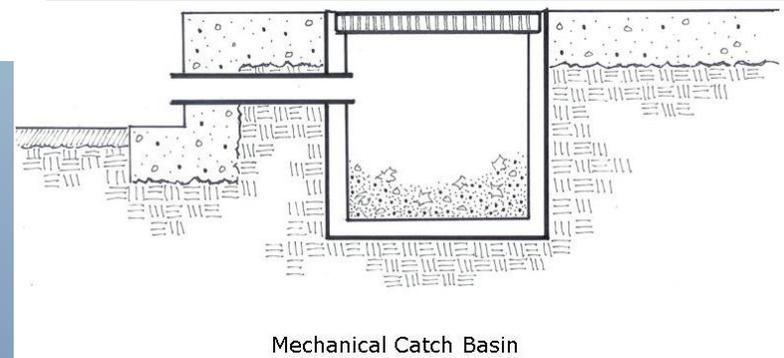
**MECHANICAL**



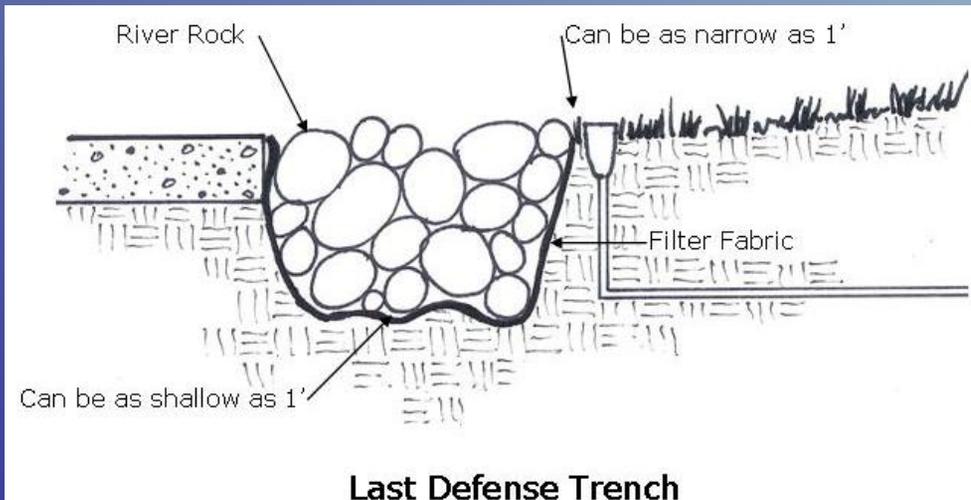
## BIOLOGICAL / CLEANING



**Biological Catch Basin**



**Mechanical Catch Basin**



**Last Defense Trench**

# SCREENING

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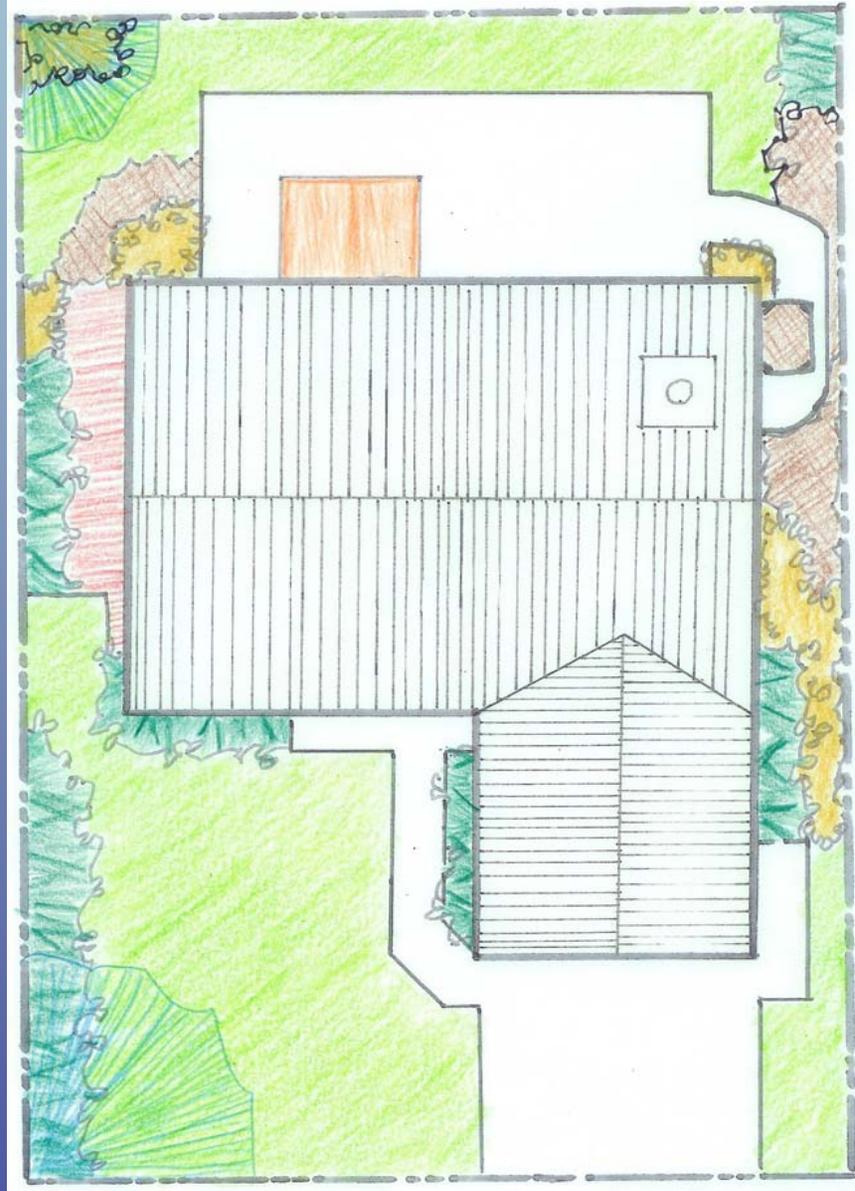
EXAMPLES OF CPR

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PERMEABLE AREA:  
40%

37%: House  
27%: Grass (67.5% of permeable area)  
18%: Concrete  
8%: Shrubs



RAINWATER  
RUN-OFF:  
27,112 gallons a  
year.

Huntington Beach  
December 2005

THE AVERAGE RESIDENTIAL LANDSCAPE



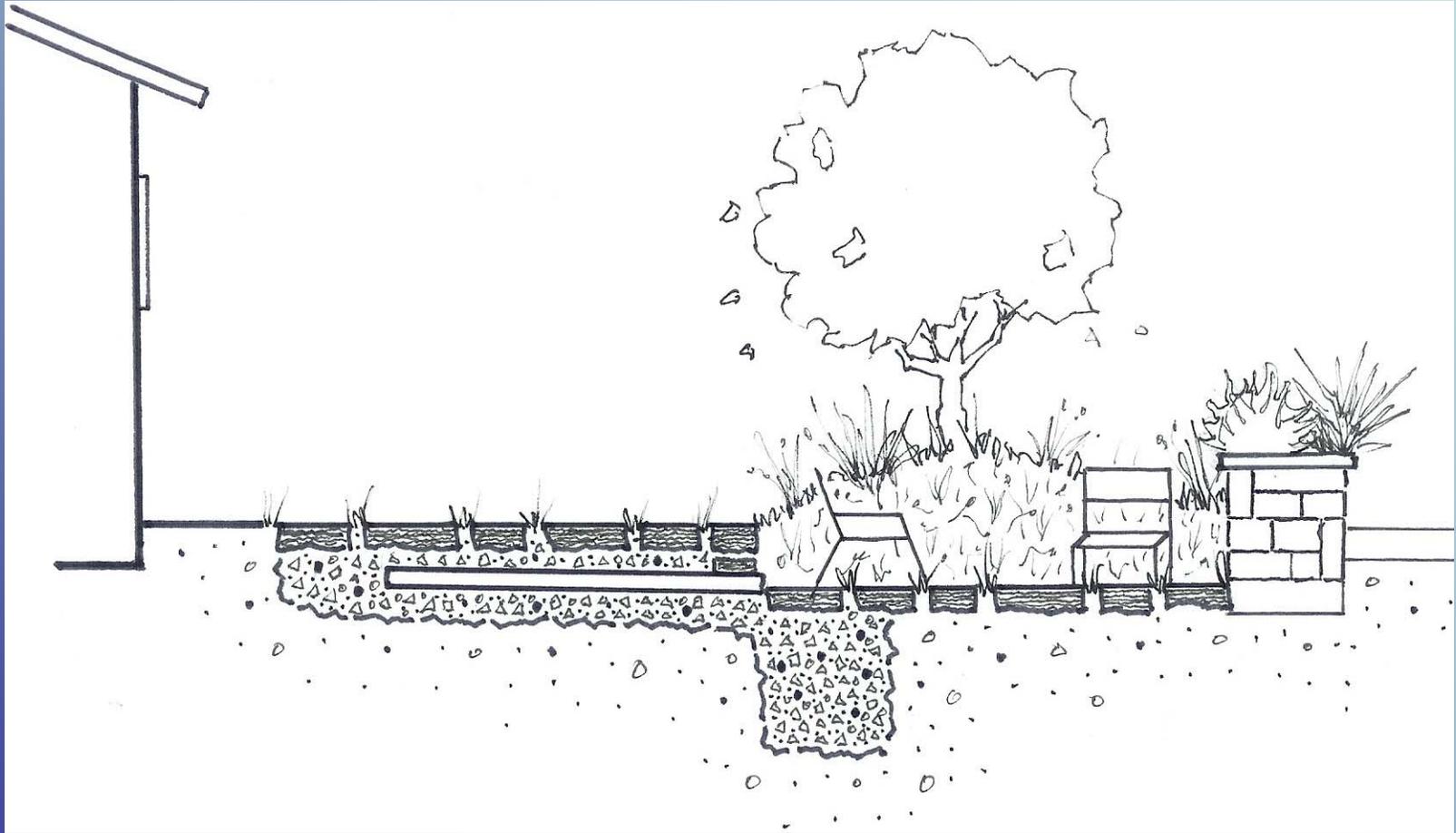
THE AVERAGE RESIDENTIAL LANDSCAPE



Watershed Friendly Property









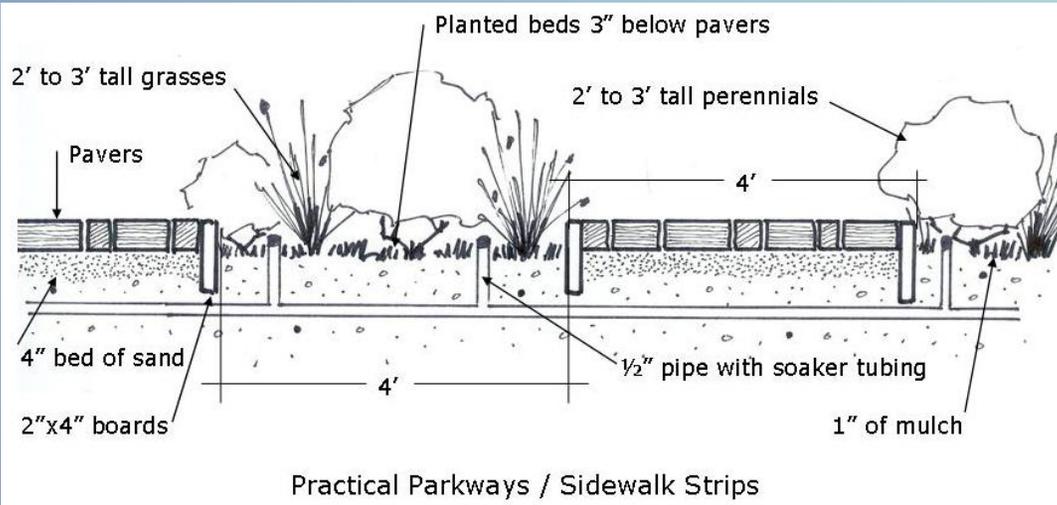


**NO TILL**

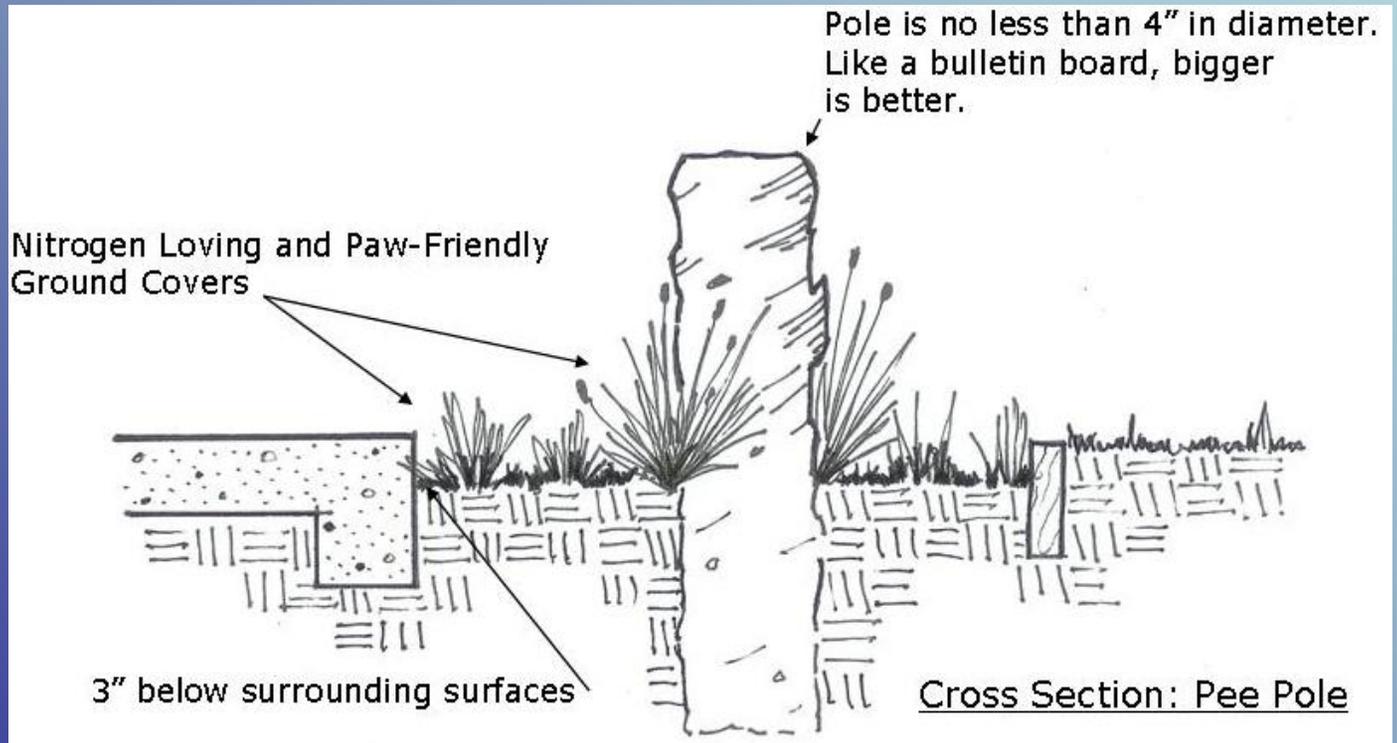








## Getting Creative

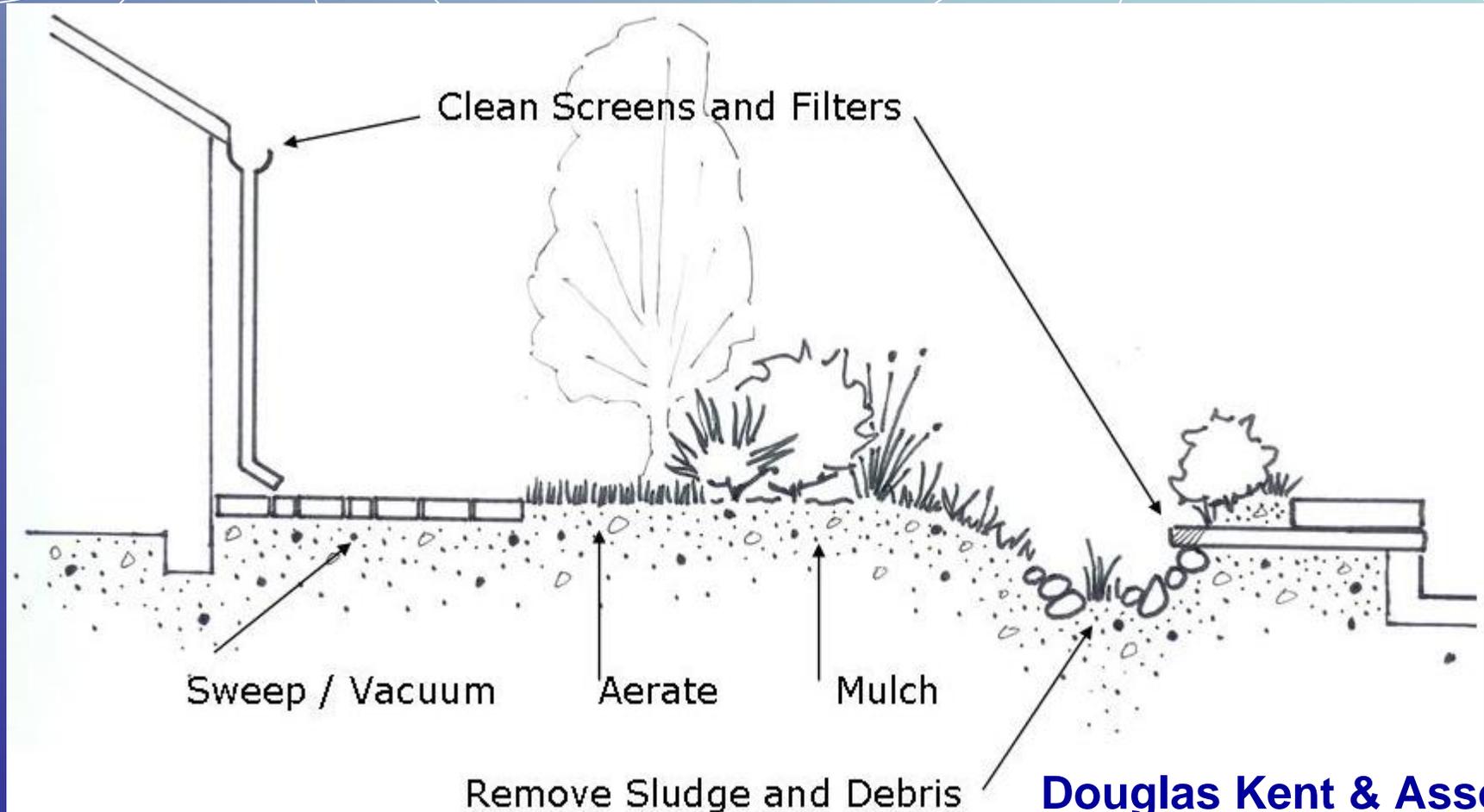


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MAINTENANCE

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