Carriage Hills Gardens

A Sustainable Low Impact Development For a Stronger Community and High Quality of Life
Master Plan
Storm water management
Anaerobic digestion

- Water saturated environment impedes diffusion of oxygen
  - creates a favorable oxidation reduction potential for denitrification (Maier et al. 2000).
  - By raising the level of the underdrain, aerobic conditions are available at the top portion of the rain garden, which still functions hydraulically, and anaerobic conditions exist below the underdrain, where denitrification can occur.
Biphasic digestion

• Saturated phase and infiltration phase
  • Allows for saturation where anaerobic digestion and denitrification can occur
  • After pollutants are removed, water is pushed out of the first phase and into the second where it is allowed to infiltrate the soil
  • Water only moves out of the first phase when the head pressure is great enough
Community Event Space

Rain garden is able to hold large amounts of water in engineered soil while housing many wild and native flowers, bushes, and trees for aesthetic qualities.

Turf concrete walk and everything above high water level is maintained for heavy use associated with the pavilion and outdoor events.

Three season pavilion utilizes open air and sheltered areas, as well as restrooms and kitchen space.

Permeable asphalt in parking areas slows storm water and undergrounds to retention basin.

Removable parking bollards prevent car access between plaza and park when extra parking is not needed.

Maximum water level in wet season.

Maximum water level regulated with cistern during dry season.

Willow and river Birch are heavily used for four season characteristics and success in stressed sites.

This is a beer garden dedicated to those merry souls, who make drinking a pleasure. Who achieve contentment long before capacity and who, whatever they may drink, prove able to carry it, enjoy it, and remain gentlemen.
Thank you