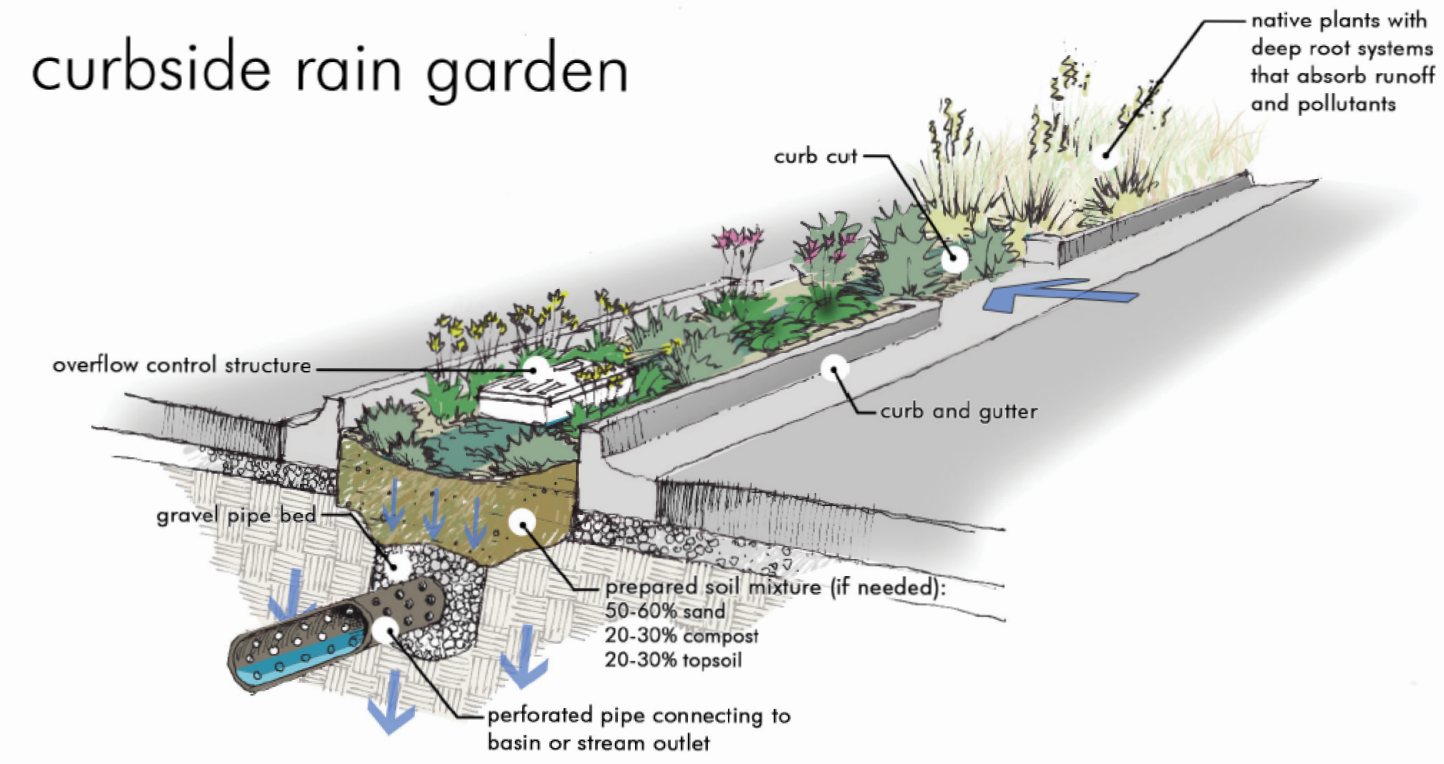


Blue roof is explicitly designed and sloped to capture and slowly release rainwater, in order to slow the rate of runoff and reduce the potential for related flooding. **BENEFITS.** + Temporary storage of rainfall mitigates runoff impacts.

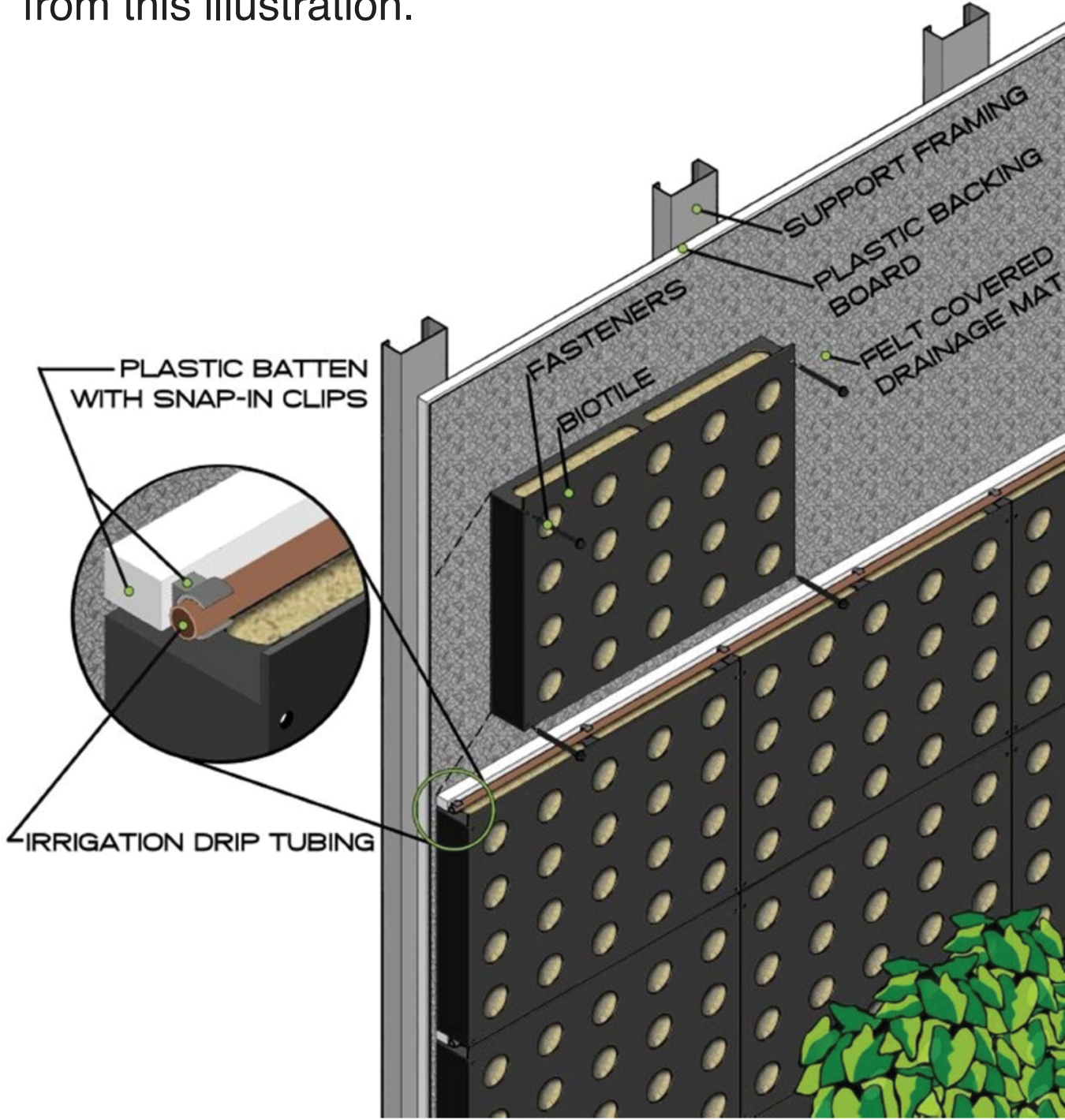
#### curbside rain garden



#### Green Wall

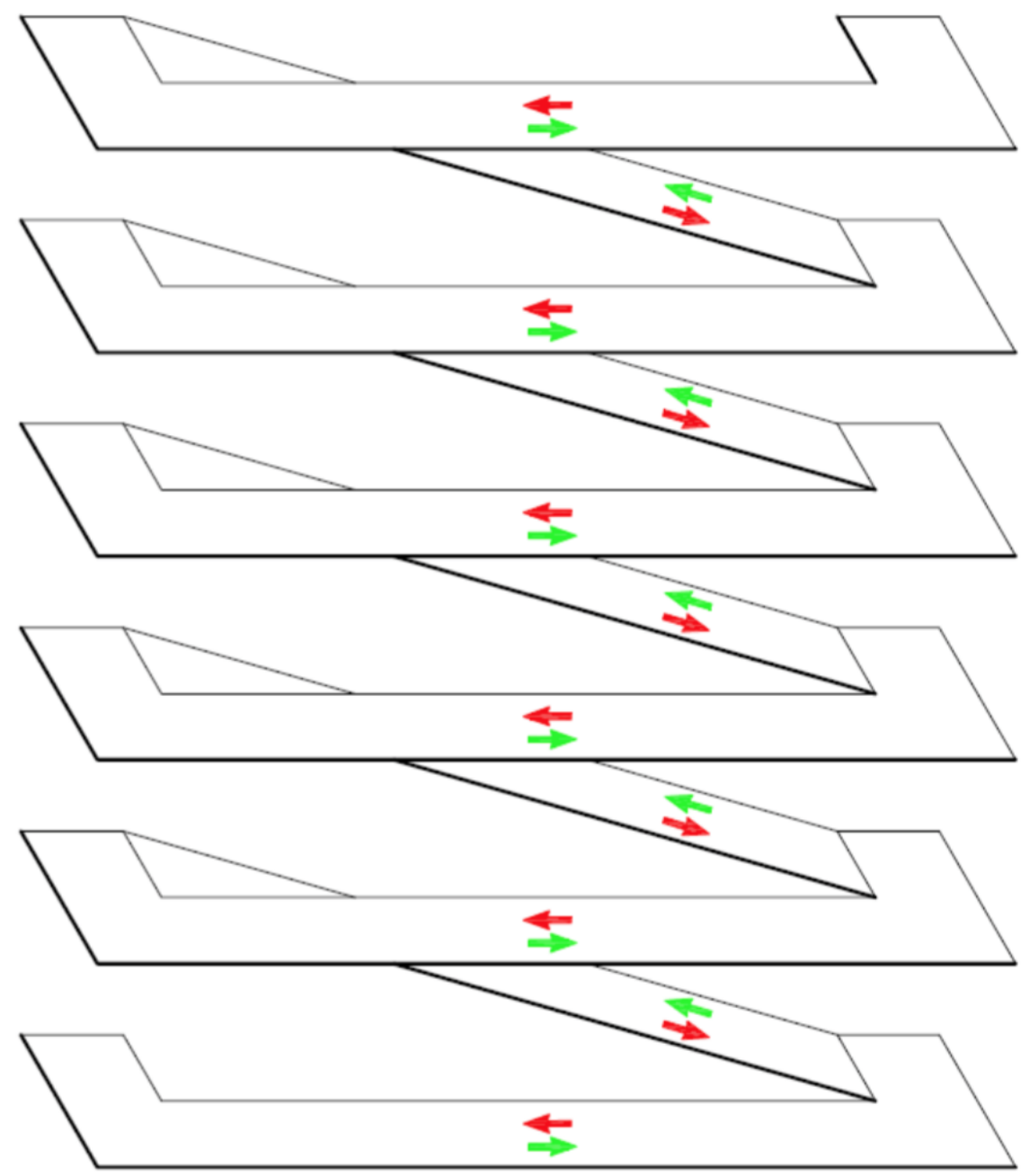
The majority of green walls or living walls on the market today utilize thin plastic/metal boxes or trays that are filled with soil, mineral wool, peat, coco coir or similar materials. These are pre-planted and then hung vertically. This method is just slightly more complex than hanging potted plants on a wall.

A major shortcoming to modular green wall boxes is aesthetics. The variety of plants that can be used is very limited therefore severely reducing design possibilities, creativity and artistic freedom. The overall shape tends to look quite boxy, squat and geometrical as you can see from this illustration.

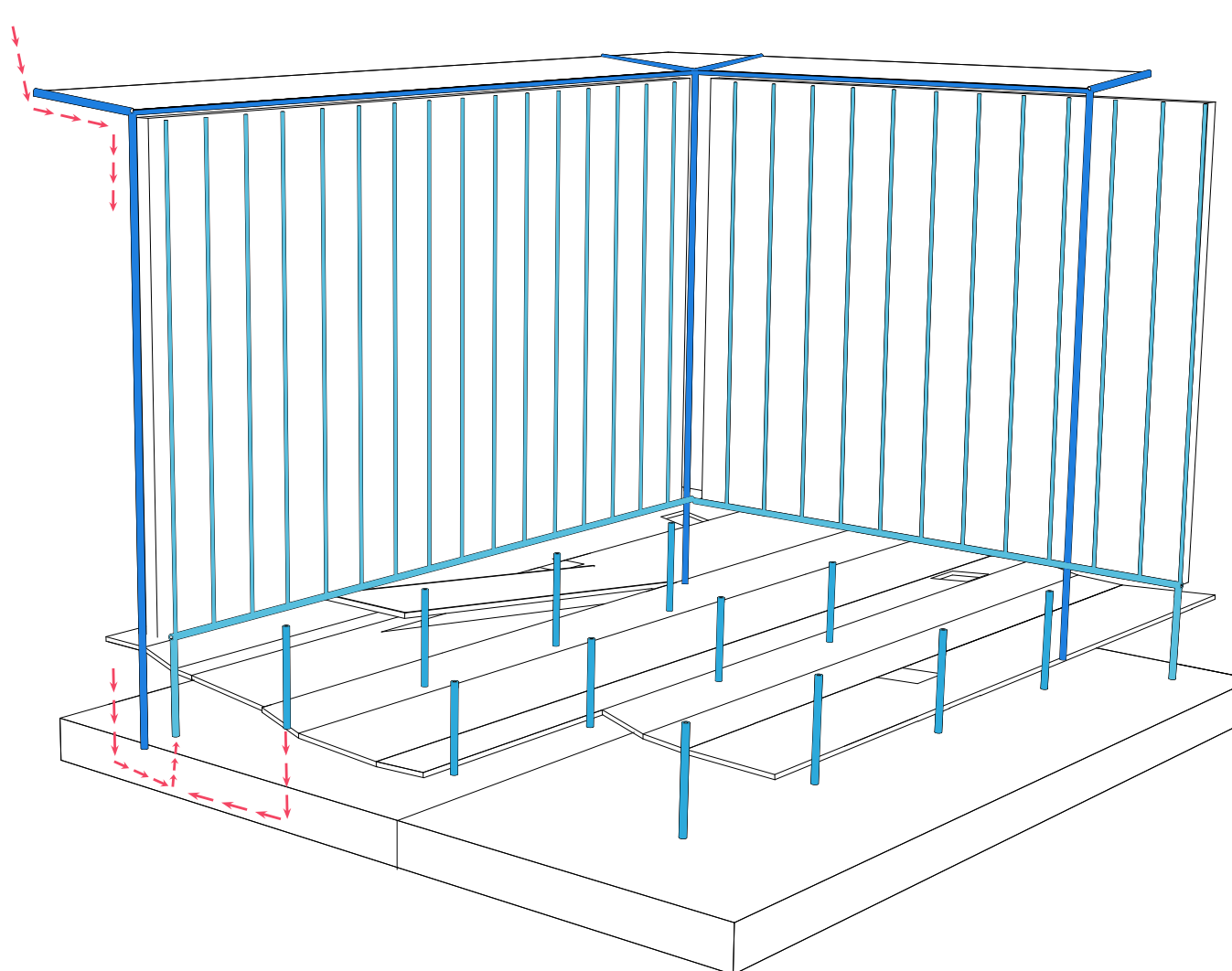


#### Underground Parking Ramp

Single Threaded Helix with One Level Bay

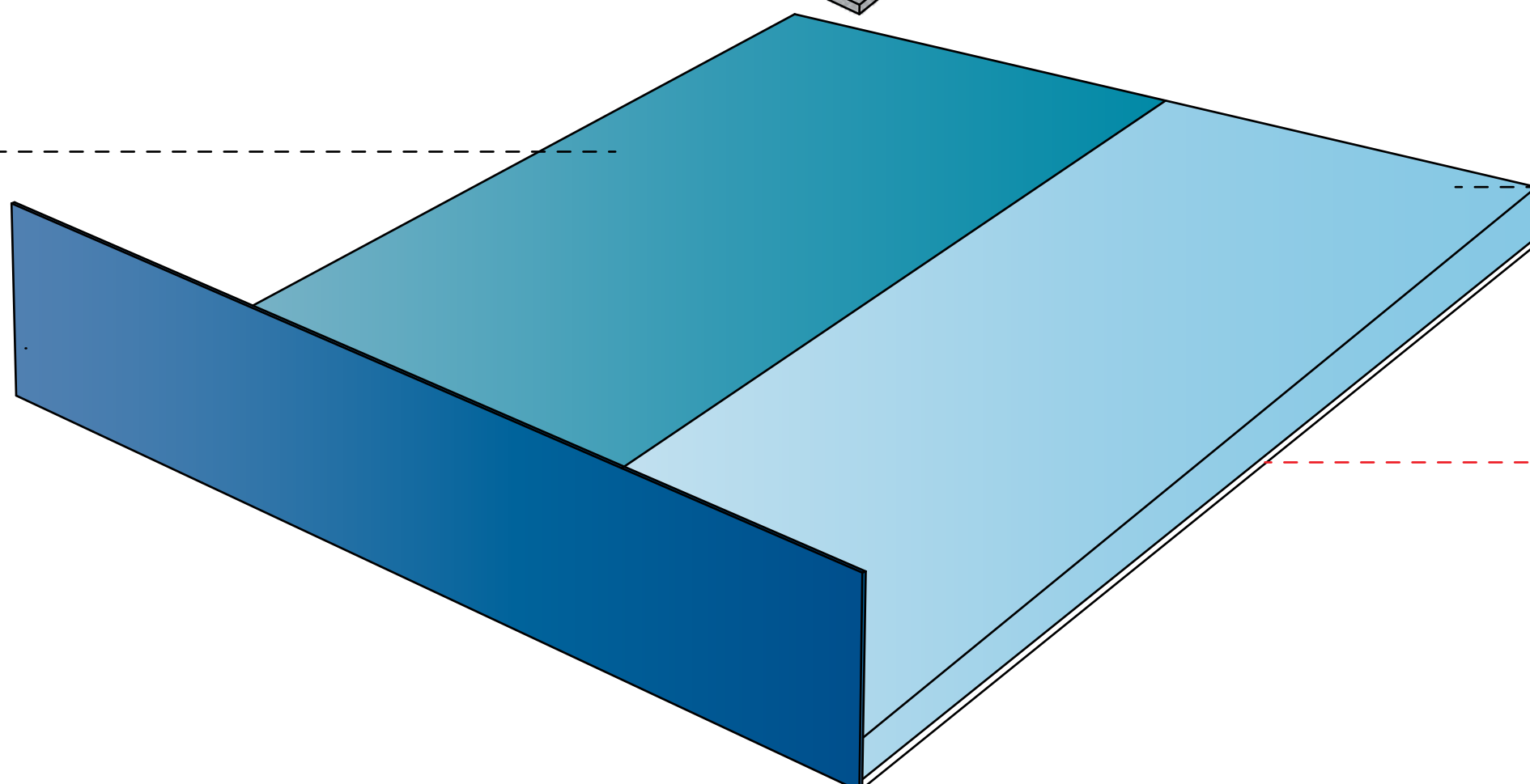


Non-parking ramp slopes has a maximum slope in the 12% range.

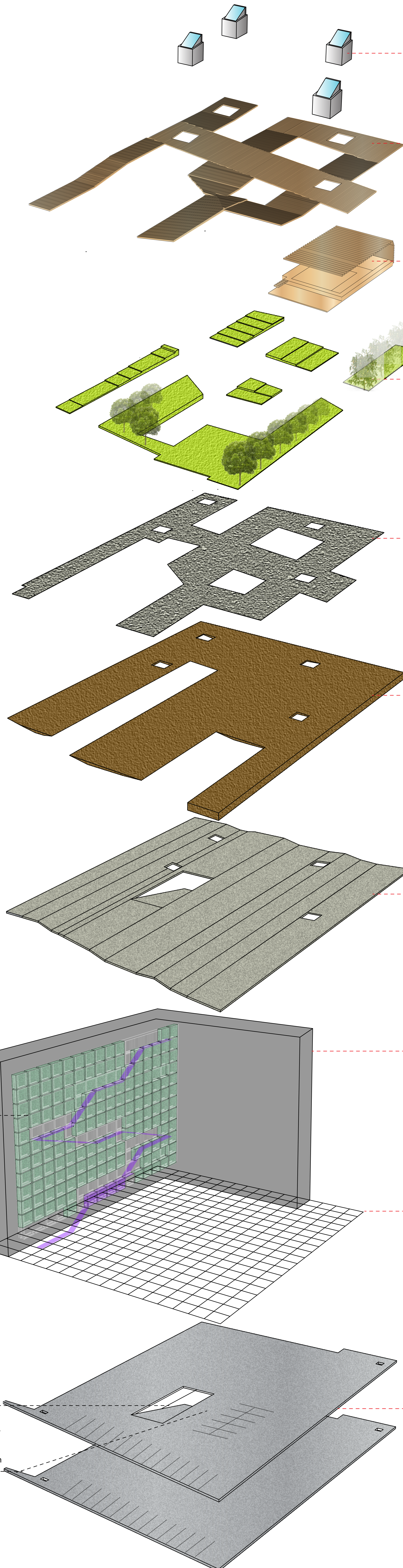


#### Irrigation Tank

The irrigation tank is filled manually on a regular basis to provide an adequate supply of irrigation water. Water is pumped from the tank to the green wall. Water is distributed to the plants in the wall. Gravity pulls excess water downward. Excess drainage water collects at the bottom of the wall and is fed back to the tank. This water is then used over and over (recirculates).



#### Water Systems



Skylight

Wood Pathway

Retail Space

Green Roof

Gravel // Impervious Surface

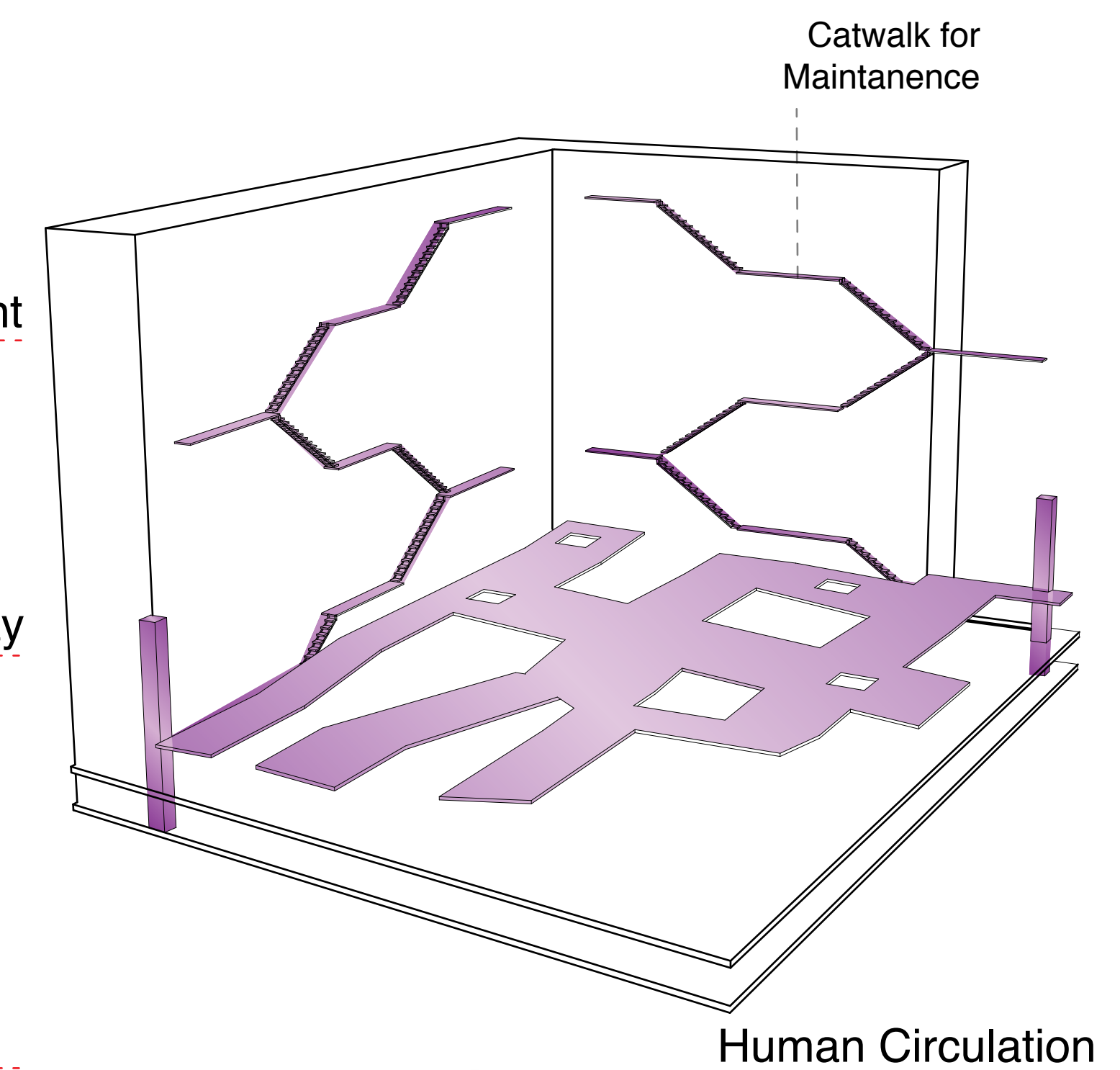
Soil // Pervious Surface

Concrete Roof

Parking System + Green Wall

Structural Grid 12x12

P1 + P2



Human Circulation

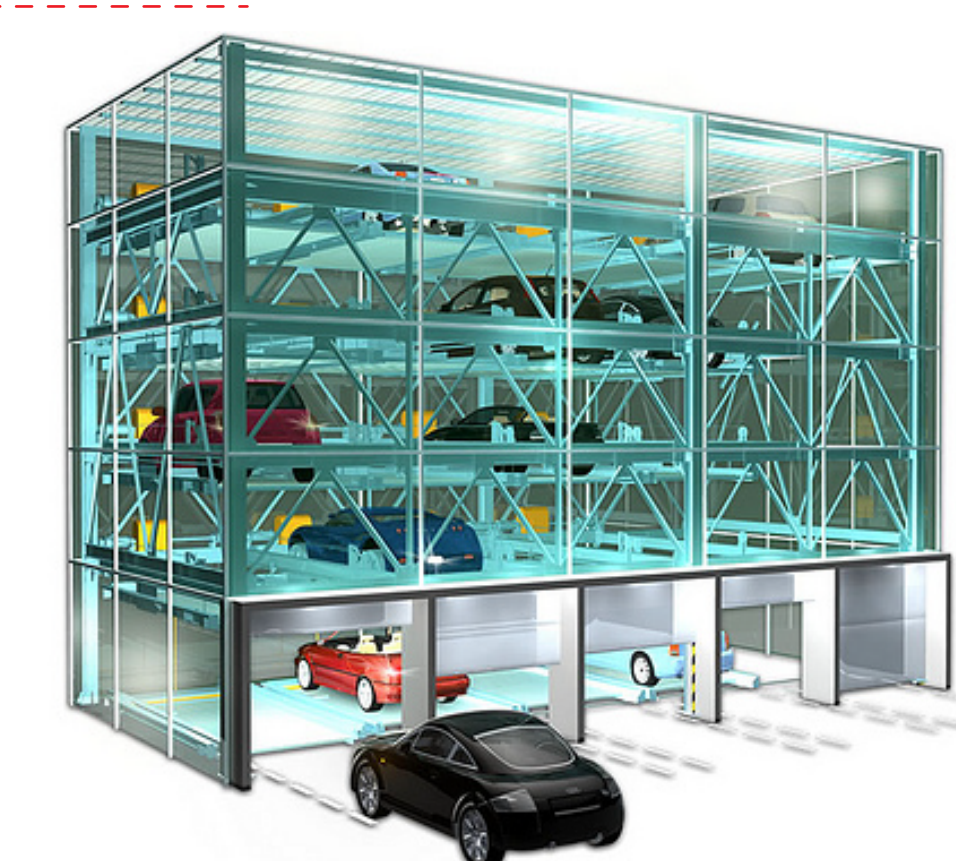
Pathway

Eating in side of Retail

Grass Field

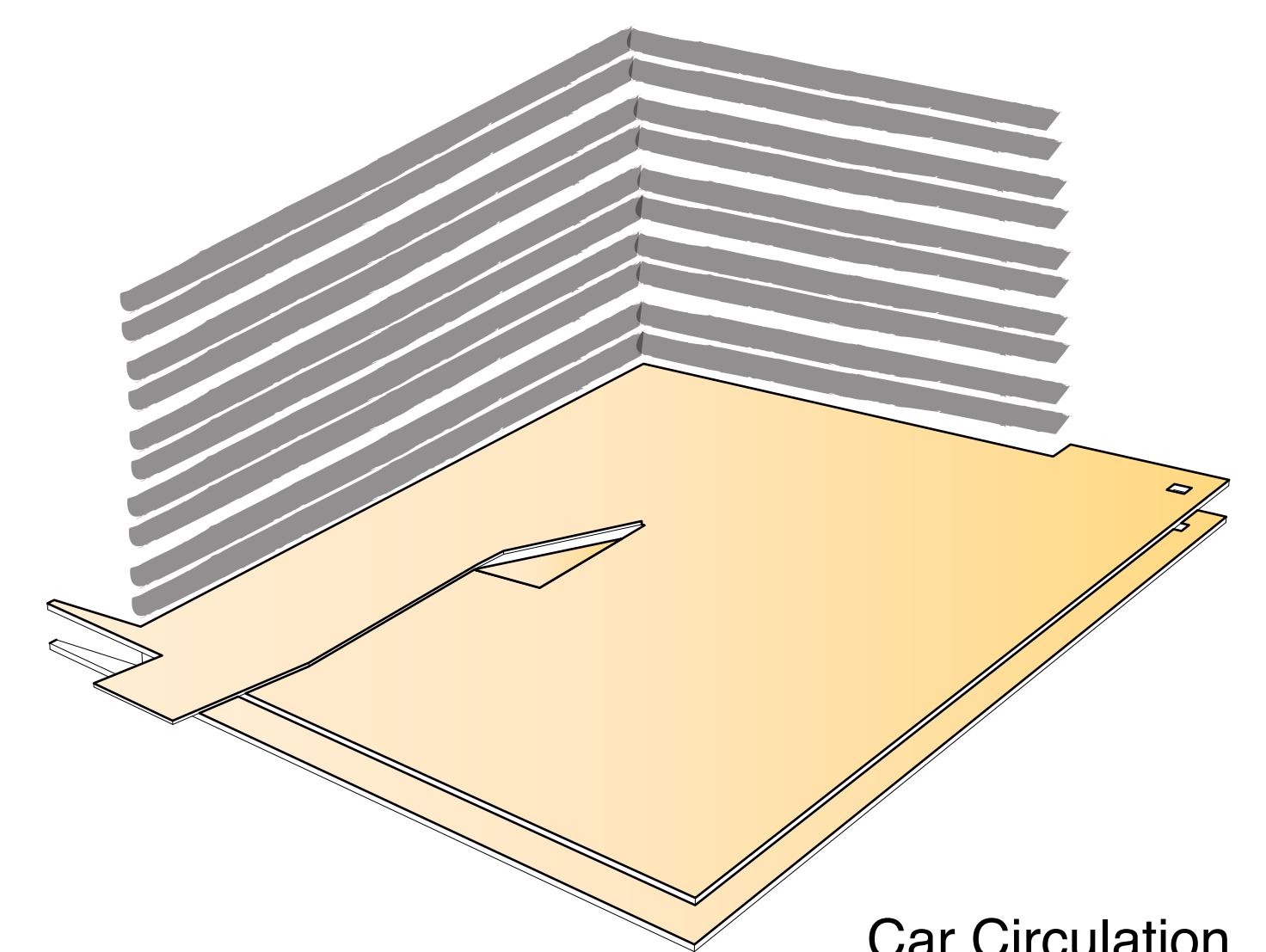
Plantation

The Green roof is partially covered with vegetation and a growing medium, planted over a waterproofing membrane. It also includes additional layers such as a root barrier and drainage and irrigation systems.



Parking System is located **Above Ground**

Entrance and Exit to the System is located on the **P1**



#### In-ground polyethylene

In-ground polyethylene tanks are more costly for two reasons: the cost of excavation and the cost of a more heavily reinforced tank.

The latter is required if the tank is to be buried more than two feet deep. Burying a tank in soil with high clay content is not recommended because of the expansion and contraction cycles of clay.

For below ground installation, the walls of poly tanks must be manufactured thicker, and sometimes, an interior bracing structure must be added.