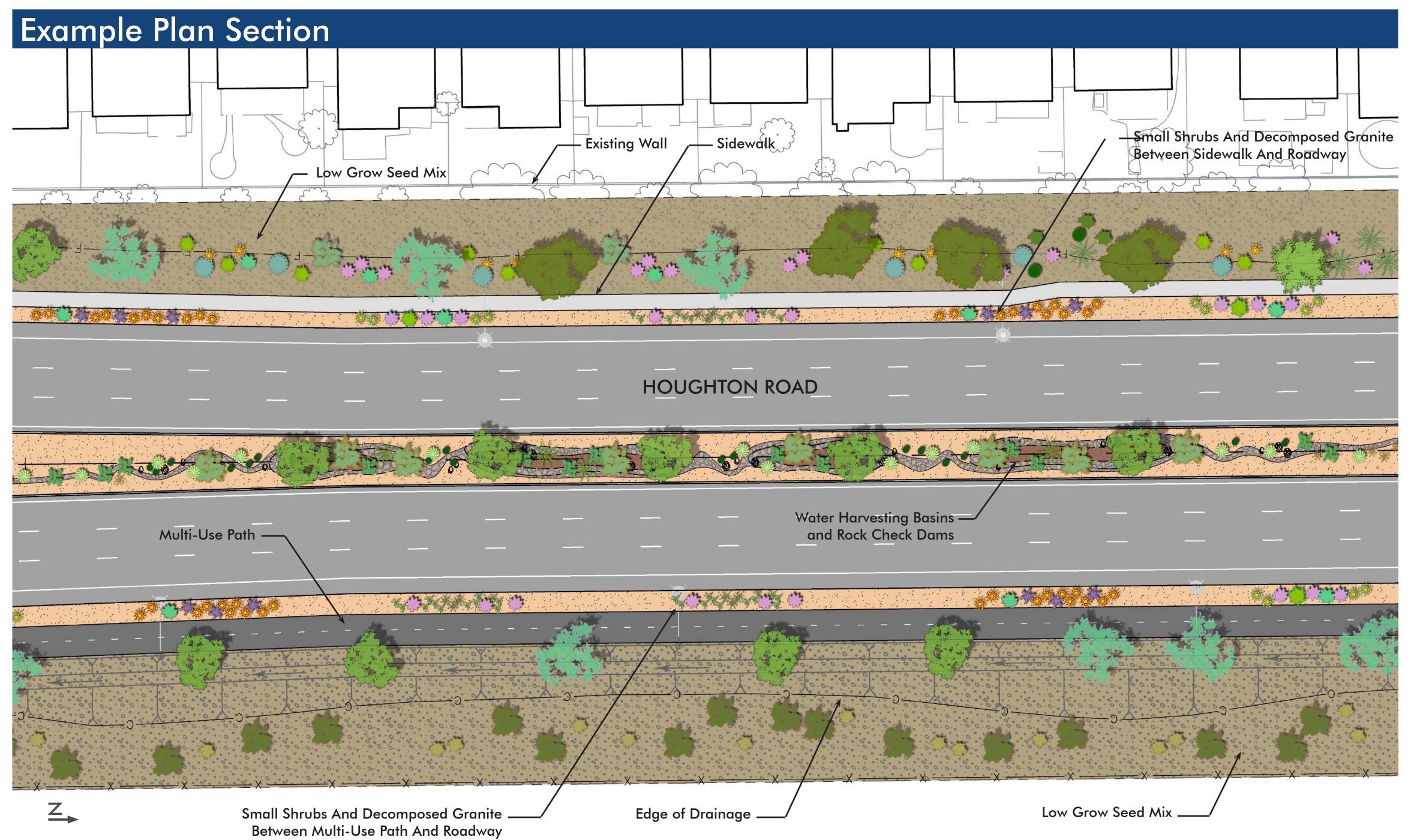
Houghton Road Corridor



















Water Harvesting

In a desert climate, water is a resource to be respected and used responsibly. Tucson receives 12 inches of rain a year on average, slightly less in the urban center. The goal in designing sustainable landscapes is to slow the velocity of rainwater, increase permeabl surfaces, and allow the rainwater to infiltrate into the soil. Passive rainwater harvesting uses earthworks to direct stormwater runoff and the soil as the storage container.

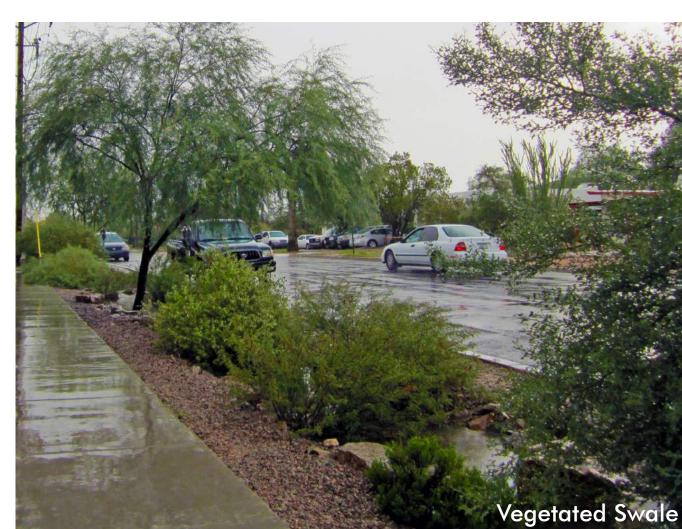
Water harvesting strategies include the use of microbasins, vegetated swales, and native and arid adapted plant material. A vegetated swale is a curvilinear depression in the land surface that collects stormwater with associated vegetation that helps to filter pollutants and slow the rate of flow, allowing more water to saturate into the soil. Microbasins are small, relatively shallow basins with sloping sides and flat bottoms that capture, detain, and use stormwater to augment the irrigation of site plant











Houghton Road Corridor

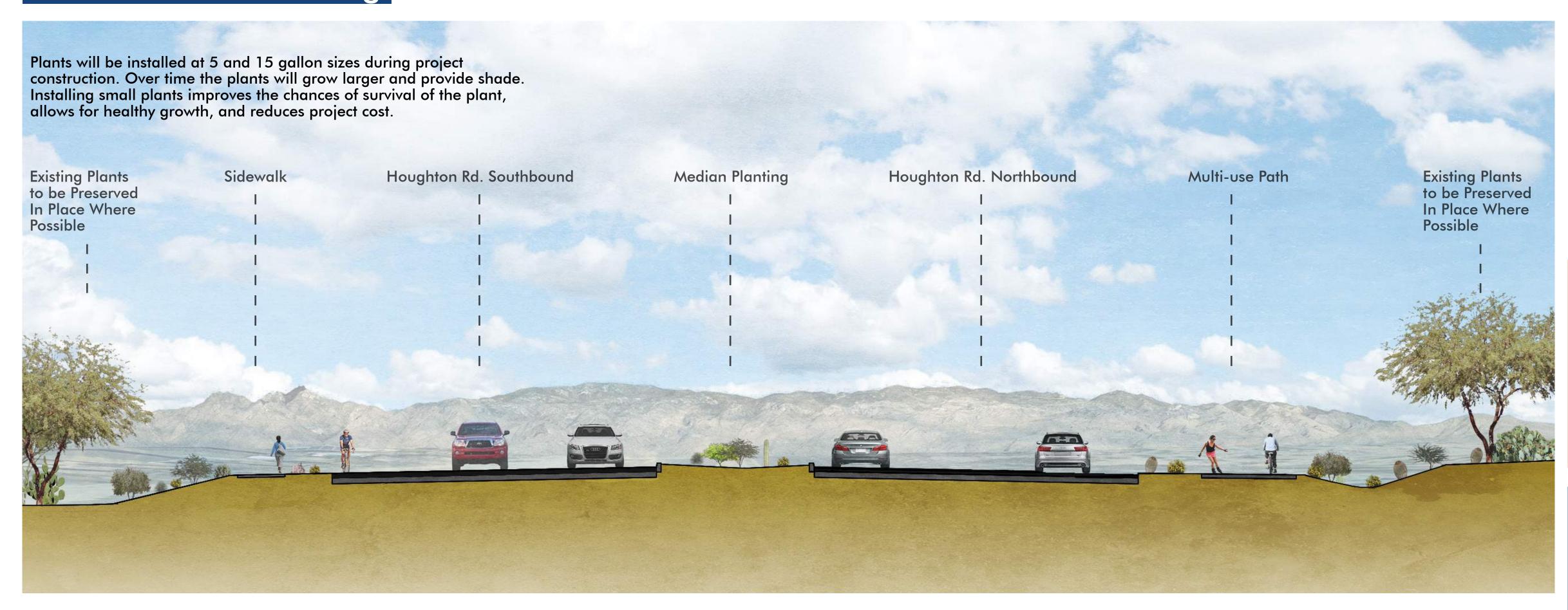




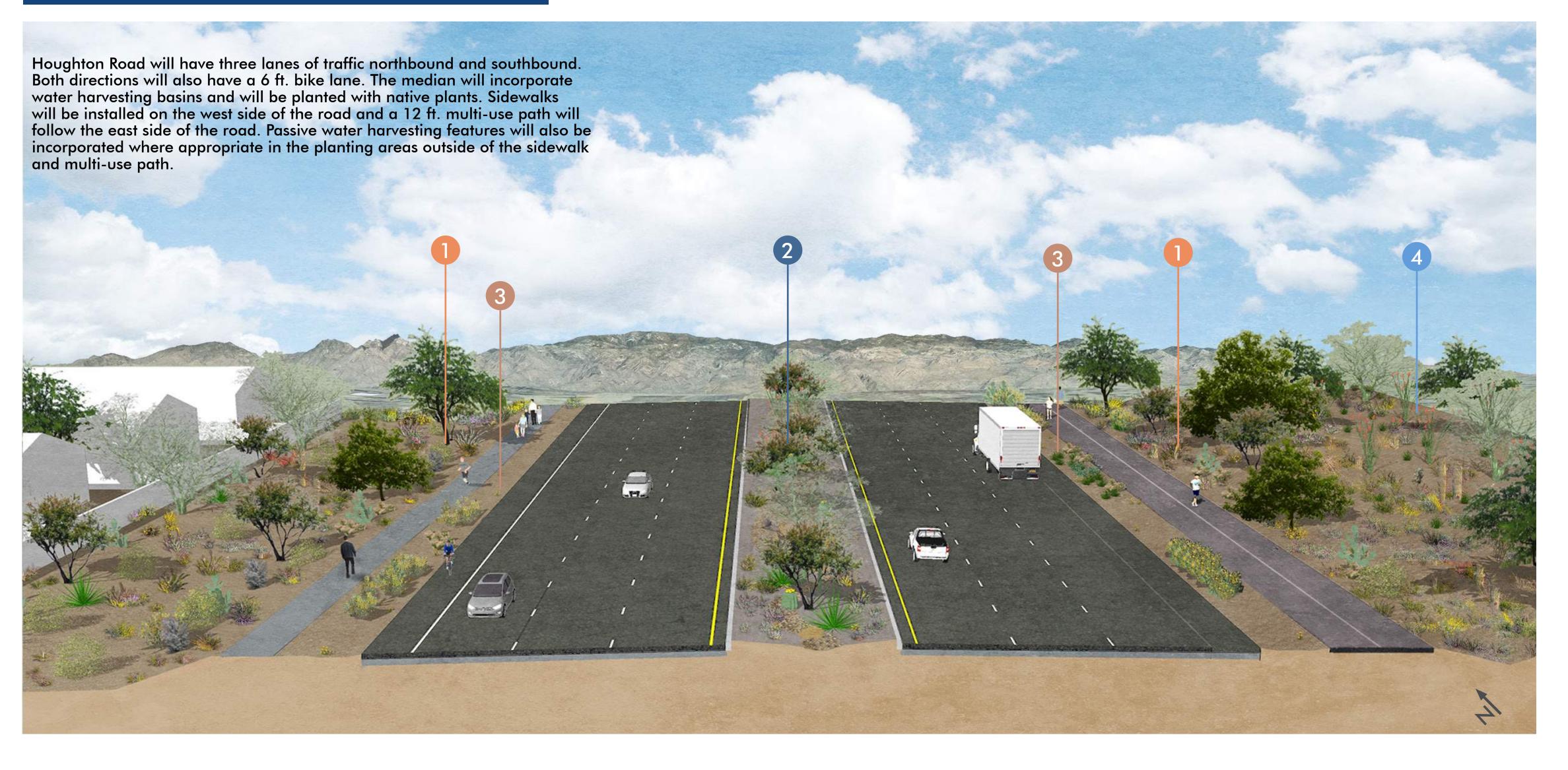


Planting Establishment

View of Initial Planting



Road View At 5 Years Growth



Plants

The plant palette will be inspired from the Sonoran Desert Arizona Upland biome. The trees, shrubs, cacti, and wildflowers that will be used for this project are mostly native species typically found in the desert surrounding the project corridor, with the addition of a few hardy species from neighboring deserts.

Although these plants have adapted to survive on rainfall alone, they will thrive with modest supplemental irrigation and passive rainwater harvesting. Once established, native landscapes using harvested rainwater require irrigation only during times of drought.

The variety of plant species will provide year-round color to the project and promote bird, butterfly, and bee species important to the Tucson Basin. Vegetation also stabilizes the soil, reducing erosion and blowing dust.





