SUSTAINABILITY STARS

PROJECT OVERVIEW

Sustainability Stars Awarded: Investigation, Investment, Integration, and Innovation

Project Type: Street, Park, and Storm Infrastructure

Local Permitting Entity: City of Houston

Project Construction Cost: $20 million

Site Size: 7.5 Acres

Project Owner: City of Houston (through TIRZ 17)

Project Engineers: RPS, OJB (Landscape Architect)

Sustainability Features: Grey to Green Site Redevelopment, Resilient Landscaping, Smart Water System, Pedestrian and Bicycle Access
INVESTIGATION STAR
Team members including MetroNational, RPS and OJB all exhibited high levels of sustainability design commitment. TIRZ 17 also recognized the economic development (increased jobs), flood reduction and quality of life benefits this project would generate for its community.

INTEGRATION STAR
The formerly concrete basin that had a single purpose of stormwater mitigation was turned into a lush vegetated basin that added detention, environmental quality benefits (water quality and trash filtering), a park and additional transportation connectivity for the community. Ecological benefits can also be observed with the new-found presence of pollinators and birds.

INVESTMENT STAR
Extensive coordination and design discussion was needed to provide the most resilient end product. Plants were carefully selected for their wet or dry conditions on the site and the substantial existing basin structure was left untouched wherever possible to reduce waste and cost. Design further included scrutiny over the circulation and access paths for both pedestrians and bicyclists.

INNOVATION STAR
This project transformed a City owned, concrete, pumped detention basin into a beautiful amenity, while going above and beyond in serving its original purpose. It is completely unique to the area, not only with the level of collaboration required, but with the transformation of the concrete basin surface using the geoweb “green roof” system. This project is already starting to inspire planning of other projects in the Houston area.

BENEFITS & ADDED VALUE
- 12.5 acre ft. increased detention capacity
- Additional transportation connectivity (bikes, pedestrians & cars)
- Activated park space
- A place to exercise
- Economic development & job growth
- Improved water and air quality
- Reduced heat island effect
- Wildlife refuge