



MEDIUM PROJECT

Project

Washpad bioswale - Cog Hill Golf & Country Club, IL, USA

Applicant

Angelica Carmen,
Sustainability Specialist

Budget

\$11,000.00



PROJECT TIMELINE

March 4: Willow tree removal [4]

March 8: Site excavation and clearing April 2-5: Framing & Pouring of Concrete Gutter/channel

April 27: Laid sod collar along outer perimeter of swale May 15: Tree stump grinding and removal

May 23: Swale channel excavation and backfill of compost and sand mixture June 3-5: Planting of 650 wetland plant plugs, 3 swamp white oak trees

June 9: Laid riprap rock along concrete channel outlets

August 2-4: Spread compost and native pollinator seed mix along project perimeter

October 20: Placed the FairWays Foundation educational signage on project site

OUTCOMES

- Site beautification
- Native habitat biodiversity
- Cleaner water quality management
- Sustainable course maintenance practices
- Engaging public in important of sustainability matters on course

PROJECT OUTLINE

Cog Hill's scale of maintaining 4 full courses totaling 1500 acres requires an extensive equipment fleet, translating to daily washing of such equipment. Existing infrastructure included a concrete washpad that flooded down into a drainage basin that never quite drained.

Our proposed bioswale renovated the 2,000 square foot area to include a bioswale filtration design comprised of 6 different native wetland plant species, a concrete gutter that channeled the rinsate from the washpad down into the swale, native swamp white oak trees and a pollinator buffer. The goal was to channel the polluted washpad water into the native plant swale where our wetland species would be able to rapidly absorb mass amounts of water while filtering out toxins, petroleums, excess fertilizers, and more, returning cleaner water back into the ground supply.

We transformed a flooded mosquito pit of invasive plants and willow trees into a thriving site of native biodiversity that not only performs ecosystem services, but also contributes to the aesthetics of the property. With our project situated parallel to the eighteenth fairway of Dubsdread, we've been able to engage and educate people from all walks of life as they play through the last hole of the championship course.

BUDGET MANAGEMENT

After spending months in research and development, we created a wishlist of all design and functional aspects of our project, received quotes and began to build our budget. From there, we spent some time editing bids, material quantities, project parameters, etc. to fit within the asking amount we applied for. I used a declining balance to track all of our project expenses.

LEARNINGS

If I were to carry out the project again, the only change I would make is editing the slopes and pitches of some of the infrastructure areas to better channel the water fully into the swale. I would also budget a little bit more of the overall cost for potential cost increases of bids to ensure full financial coverage.