REGISTRATION NO. D20

## THE DUCK POND

UNM's signature campus water feature and a popular relaxation spot.

This project adapts the area to serve as a surge pond for larger storm events, introduces mycofiltration to address E. coli problems caused by waterfowl population, and adds visual elements to increase awareness of stomwater issues on campus.

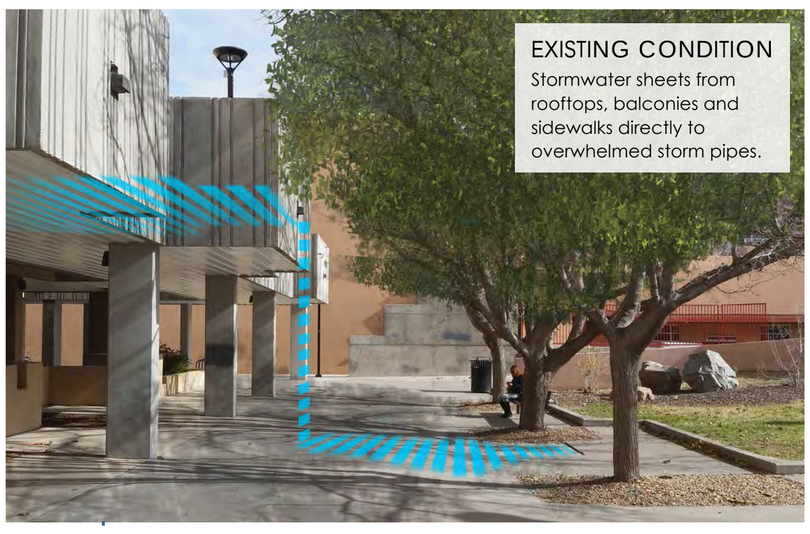
## MYCOFILTRATION WATER TREATMENT

Floating art pieces house mushroom mycofiltration farms on the pond's surface. Developed by UNM student research, these mycofilters help to reduce E. coli by up to 98%.

## RAISING CAMPUS AWARENESS

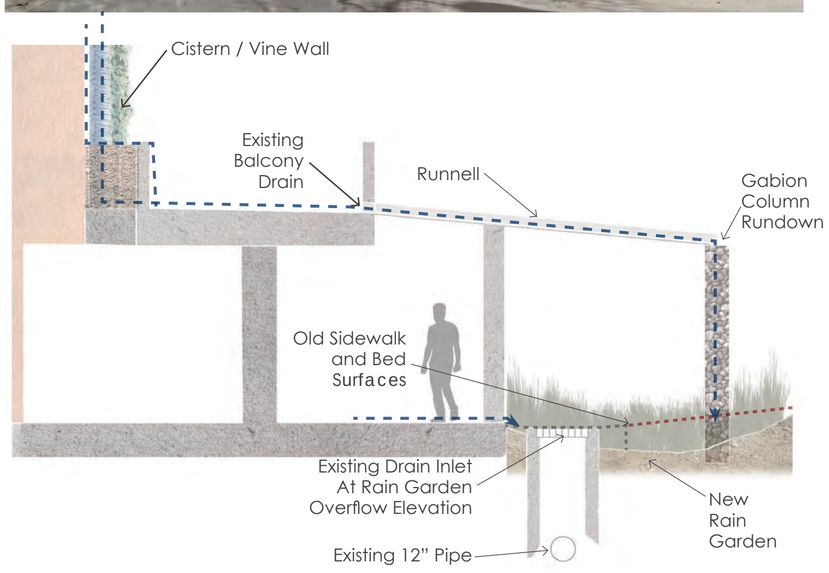
A new visual feature is installed at the outflow point from the pipe diversion into the pond. A portion of the pipe is exposed beneath the ground to reveal infrastructure.

# FLOW A PROPOSAL FOR STORMWATER DESIGN ON THE UNIVERSITY OF NEW MEXICO CAMPUS



### EXISTING CONDITION

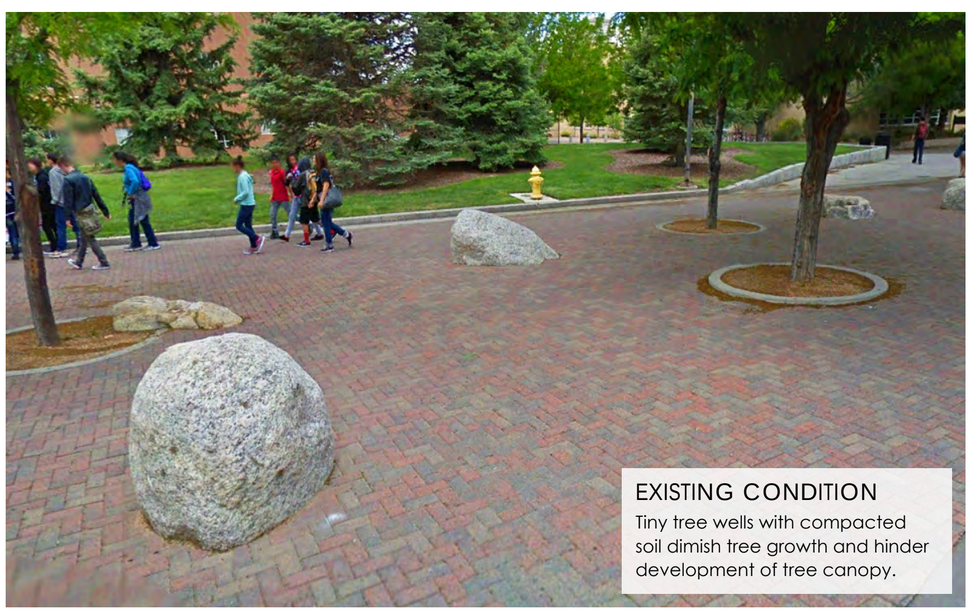
Stormwater sheets from rooftops, balconies and sidewalks directly to overwhelmed storm pipes.




## LID PRACTICES IN THE DESERT GARDEN

With simple changes above ground, the design avoids the need for costly changes below. The sidewalk is pulled back and runnels added to direct rooftop, balcony and sidewalk flows to permeable garden spaces. Rain runoff supports arid adapted pollinator rain gardens before infiltrating.

In larger, more intense events stormwater can collect in the rain garden before an overflow condition allows for water to spill over into the existing inlets.



### EXISTING CONDITION

Tiny tree wells with compacted soil dimish tree growth and hinder development of tree canopy.

## HEALTHIER TREES, HEALTHIER WALKS

Expanding tree wells into rain gardens with native cluster grasses improves life for trees and students. Stormwater is better able to support plant life. Grasses need only a single annual cutting in early spring, keeping maintenance demands low.