University Sidewalk Reconstruction: Root Control

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The UCF Tree Team is at it again, this time fostering cohabitation of trees and urban sidewalks at a busy intersection. Large roots of a maturing Live Oak behind the University of Central Florida sign on University and Alafaya have been pushing up slabs of sidewalk, resulting in a tripping hazard. Instead of utility cutting roots and damaging the structural integrity of the tree or removing this majestic piece of UCF, tree team members taught the tree a lesson in cooperation with a technique called root guiding.



Figure 1: Roots

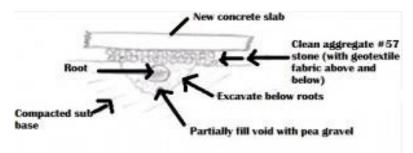


Figure 2

This technique (Figure 2) gently coaxes the trees roots in a pre-determined path of least resistance by using aggregate stone as a cushion. In this fashion, the tree's roots will naturally expand down into the porous aggregate stone instead of up into the denser concrete slab. Due to the duration of time since the roots have been growing underneath the sidewalk, a slight reduction of root girth was necessary. This reduction allowed the concrete to lay flush with the other slabs, while still allowing the functionality of the tree's roots.



Sidewalk after root excavation