

Channel Stabilization and Improvement In and Around Palm Park

Along Waller Creek, there is many areas that are completely eroded and the structures are destroyed. We chose the area shown in Figure 1 that is adjacent to Waller Creek, due to the destruction of the walkway structures as well as the mass erosion. We determined that we can use HEC-RAS to create a river system that mocks Waller Creek in this area. By determining the amount of stormwater runoff this area currently has, we can comparing this data to data received if this area was fixed by removing existing structures and implementing an infiltration system that will reduce the velocity of the stormwater as well as redirect the water elsewhere. Thus, the problem with erosion and stormwater runoff will be minimized by incorporating more pervious covers that will increase infiltration and result in the reduction of stormwater runoff as well as a reduction in erosion. This solution will be both pedestrian friendly and increase the efficiency of the land around Waller Creek by reducing pollutants carried in the creek and decreasing the likelihood of floods.



Figure 1: Basemap of Project Area between Red River & E 3rd St.

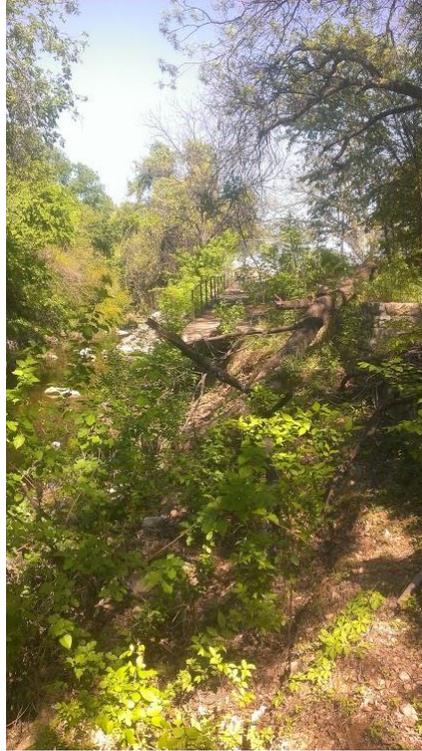


Figure 2: Example of Erosion and Damage of Walkway Structures



Figure 3: View of Walkway Area Failing