

Tannehill Branch Creek at Givens Park Erosion Repair Project

MICHELLE ADLONG, P.E. | CITY OF AUSTIN WATERSHED
PROTECTION DEPARTMENT

PRESENTATION TO PARKS BOARD

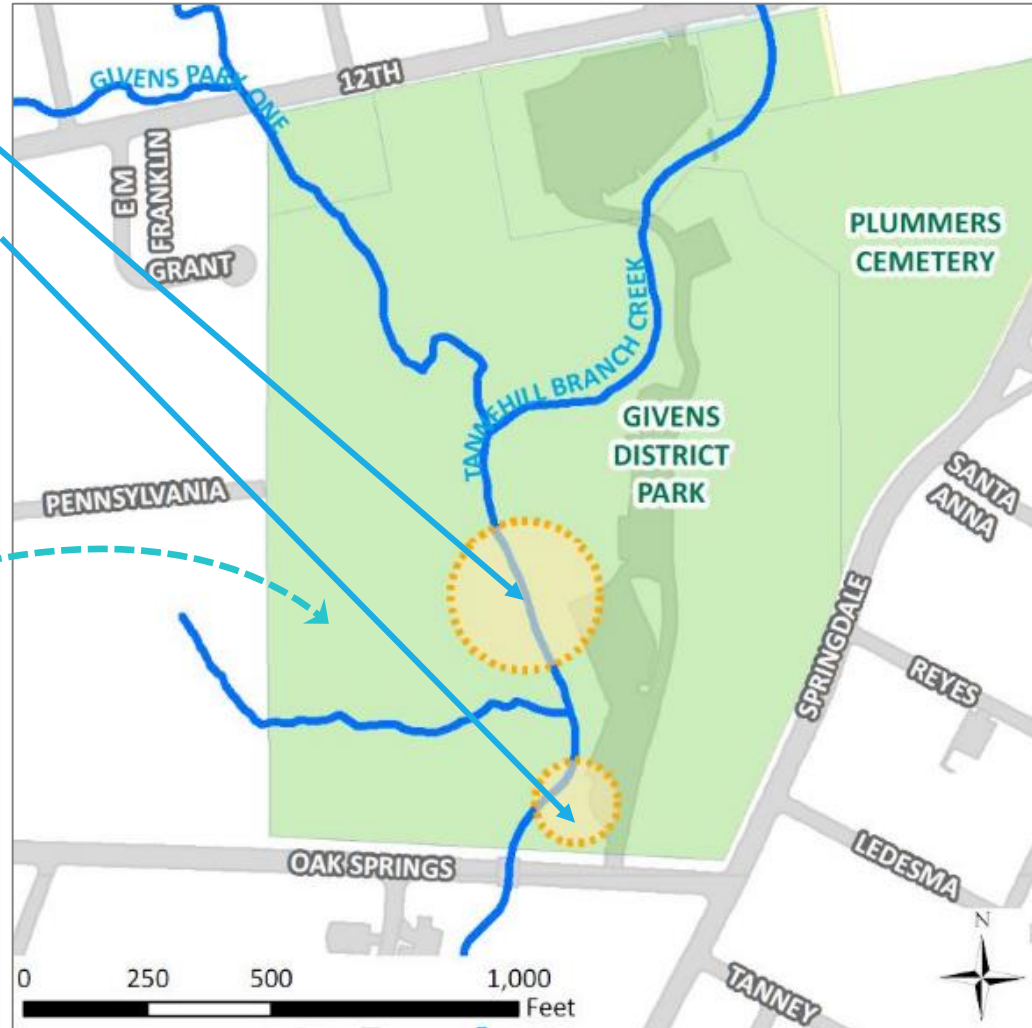
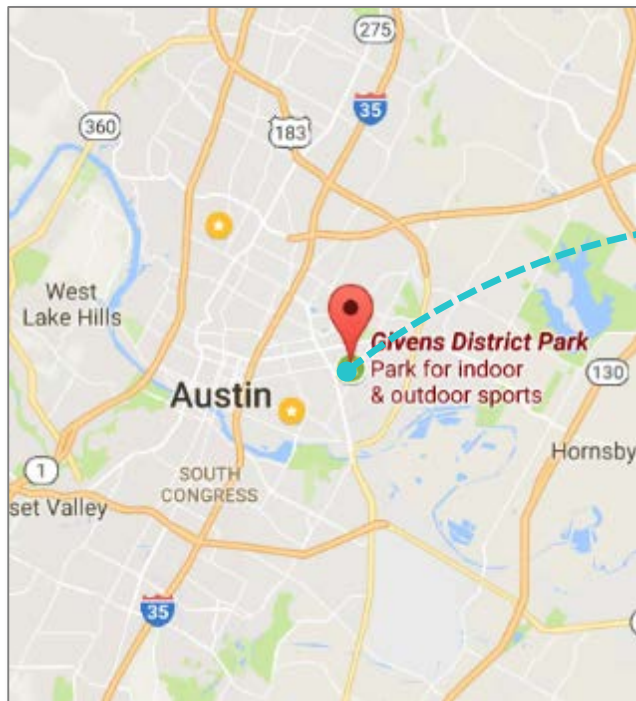
1/23/2018

Location

Work areas

Erosion Repair

Water quality Improvement



Goals

- ★ Protect park land, trees, and picnic bench from erosion

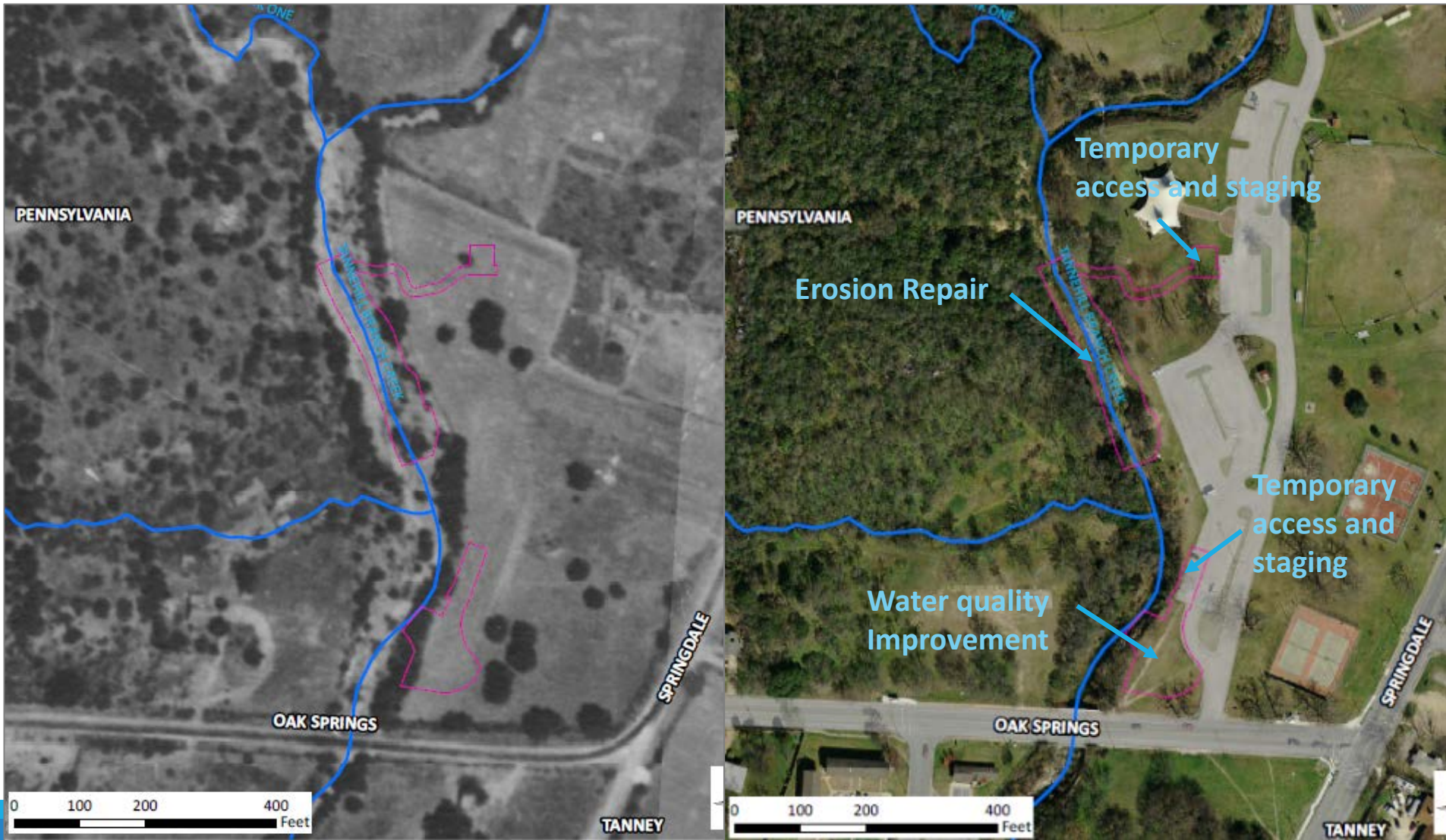


Goals

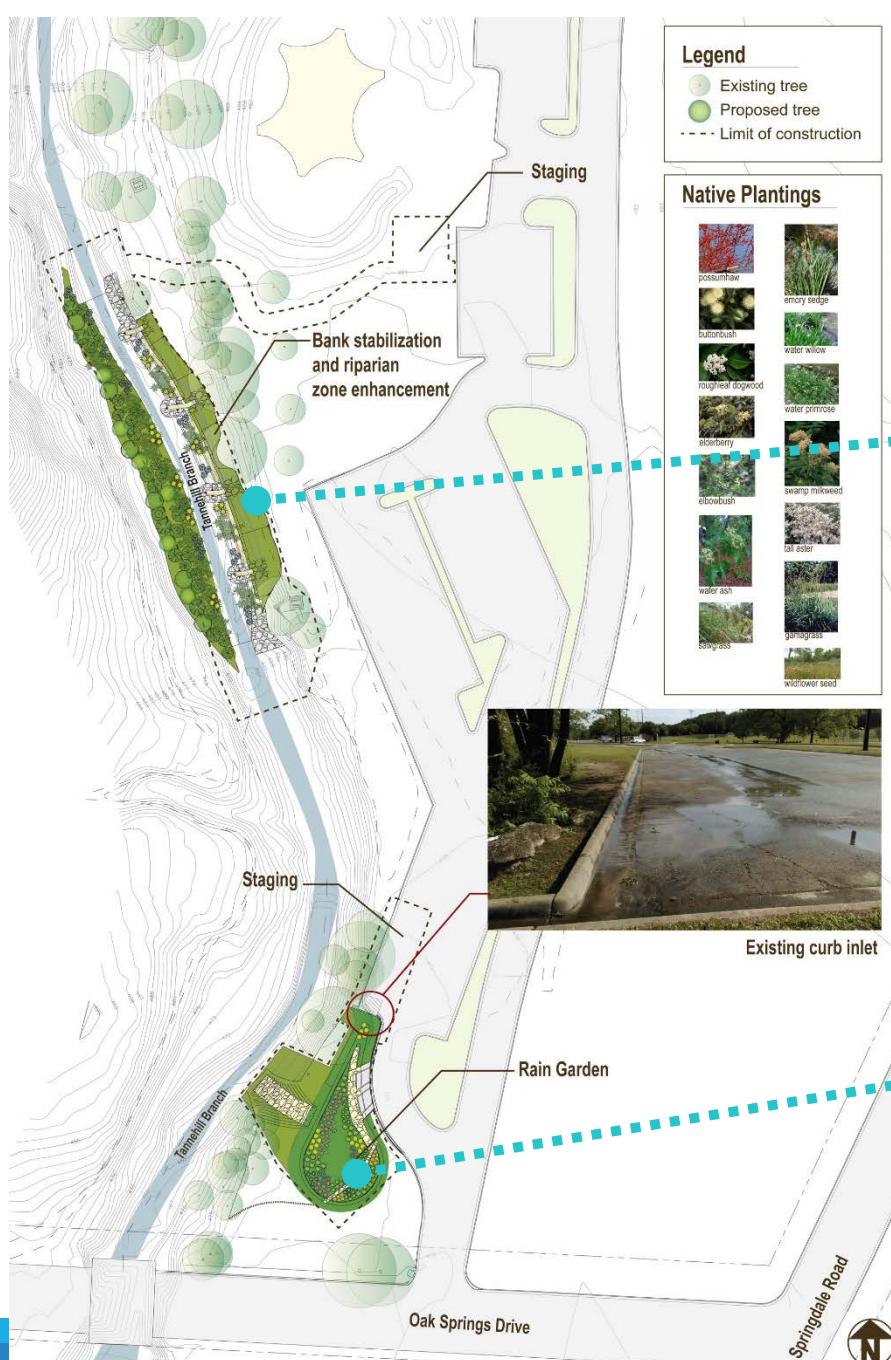
- ★ Improve water quality of Tannehill Branch at Givens Park



Tannehill Branch at Givens Park: 1940 vs 2017



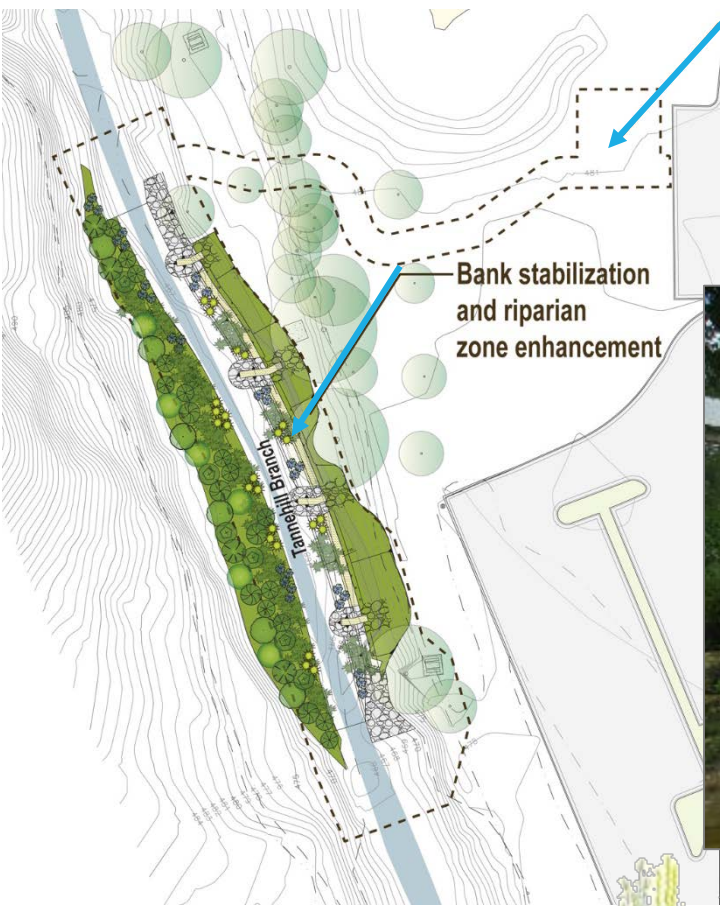
Proposed Solutions



- Stabilize the eroding stream bank and restore the natural stream

- Construct a landscaped rain garden to capture and filter erosive, polluted parking lot runoff

Proposed stream restoration

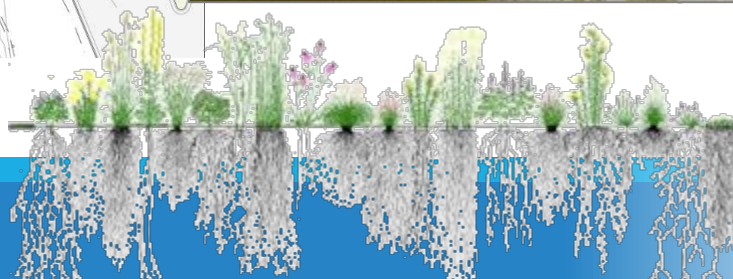


Temporary access and staging

- ❑ 300 LF (13,500 SF) of stream channel restored
- ❑ Including park access & staging, 32,000 SF of parkland temporarily used



Example project (1 year post construction)



Proposed rain garden

- ❑ 6200 SF rain garden
- ❑ Rebuild about 90 LF of curb & gutter and stabilize about 20 LF of streambank
- ❑ Total of 15,000 SF of parkland temporarily used



Example – sod only - dry



Example – native plants - during rain

Trees



- ❑ 1 tree (10" crape myrtle) to be removed
- ❑ Park has already lost large trees due to erosion; stabilizing streambank will protect existing trees
- ❑ Trees in or near Limit of Construction will receive tree protection during construction
- ❑ Tree seedlings will be planted in channel revegetation areas



Project Timeline



Request

- Construct permanent streambank stabilization and rain garden on approximately 19,700 SF of parkland within the Tannehill Branch floodplain
- Use additional 27,300 SF of parkland for temporary construction access and staging
- (Total of 47,000 SF of parkland over ~6 month construction period)





thank you

Project Web Page: austintexas.gov/tannehillbranchcreek