



## MEMORANDUM

**TO:** Parks and Recreation Board

**FROM:** Kimberly A. McNeeley, CPRP, Acting Director  
Austin Parks and Recreation Department

**DATE:** November 20, 2017

**SUBJECT: Roy G. Guerrero Channel Stabilization and Bridge Restoration**

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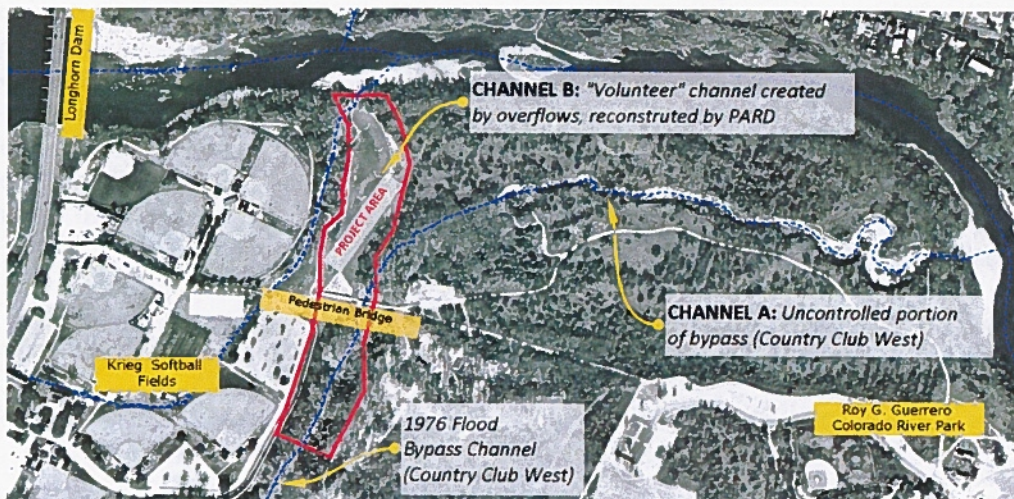
The information below provides an overview of the erosion issues at Roy G. Guerrero Colorado River Metro Park and an update on interim solutions that aim to address channel stabilization and connectivity issues.

### Project Background

In May and October of 2015, the Austin area experienced extreme rainfall events that resulted in damaging floods in many of Austin's creeks, including Country Club West that runs through Roy G. Guerrero Colorado River Metro Park. Severe erosion due to flooding caused the failure and loss of a pedestrian bridge that provides connectivity across the channel for both park users and commuters. In addition, the floods exposed a 16" reclaimed water main and caused it to come apart. This section of pipe serves the softball fields in Krieg Fields and a bulk fill station for the Urban Forestry group at the Parks and Recreation Department (PARC).

The origins of the erosion problem stem from a 1976 bypass channel that bifurcated Country Club Creek and ended without adequately engineered conveyance to the Colorado River. Over the years, there have been efforts to address the erosion causes, but to date, no solution has been sufficient to solve the problem entirely.

Consequently, due to the extreme erosion occurring in the channel of Country Club West, replacement of the bridge is not possible without a large-scale engineering project to stabilize the channel. PARC and Watershed Protection Department (WPD) are working on a capital improvement project to address the need to reconnect the trail on both sides of the creek and prevent further erosion damage on valued parkland.





The engineering design and construction work for the channel stabilization and bridge restoration projects are extensive. Since the creek will remain vulnerable during the lengthy design and construction phase, PARD and WPD are evaluating and implementing interim solutions to stabilize the channel and create an alternative, temporary safe crossing for trail users.

### **Erosion**

In May 2017, WPD completed a stabilization project for a portion of the creek that was quickly progressing towards a secondary drainage channel and the ballfields at Krieg Fields. The loss of any part of these fields would be detrimental to park operations. WPD provided in-house design and construction services to prevent further erosion towards the ballfields and PARD funded the materials used for construction. As of October 2017, this project is holding well.



WPD is currently addressing the “headcut” (leading point of channel erosion) that led to the extreme degradation of approximately 1,500 feet of the Country Club West channel upstream of the pedestrian bridge. Construction will begin before the end of 2017 and is expected to last about 3 months. This interim solution is designed to “hold the line” by stopping or slowing the erosion progression upstream until the complete project can be designed and constructed.

### **Connectivity**

PARD, WPD and the Urban Trails Program at Public Works Department (PWD) are collaborating to develop a plan for an improved low water crossing as an interim solution until the pedestrian bridge is replaced. Currently, an informal crossing is located approximately ½ mile upstream of the collapsed bridge and seems to be the only viable place within the park boundaries to cross the channel. However, this primitive crossing is very rough for most trail users. The crossing improvements that are under consideration include a combination of concrete paved path and articulated concrete mats that would provide a safer and more stable crossing surface for a wide variety of trail users. New signage to direct trail users and commuters to this improved crossing would be included in the project. PARD, WPD and PWD are evaluating design options and materials for the crossing and are investigating funding and alternative project delivery methods. The design and anticipated timeline for the interim crossing is expected to be finalized early in 2018.

### **Channel Stabilization and Bridge Replacement Project Schedule**

**February 2016:** PARD and WPD contracted for updated aerial topographic survey for use in preliminary engineering.

**May 2016 – November 2016:** WPD completed preliminary engineering analysis of potential solutions, which will be carried forward to design through the engineering consultant, HDR.



**November 2016 – April 2017:** PARD and WPD worked with Homeland Security and Emergency Management Department (HSEM) and the Federal Emergency Management Agency (FEMA) to negotiate a Hazard Mitigation Grant Program offer. All parties involved anticipate approval of the offer that will provide up to \$8.5M reimbursement towards the total project cost of more than \$13M.

**August 2017:** HDR is issued Notice to Proceed on the design contract.

**September 2017:** WPD contracted for updated aerial topographic survey to be immediately available for use in engineering design

**Anticipated Schedule**

**Spring 2018:** Public meetings to present and discuss design concepts for the channel stabilization and bridge replacement project and solicit community feedback

**Summer 2018:** 60% Design complete

**Fall 2018:** 100% Design complete

**December 2018 – September 2019:** Site Plan permit process

**November 2019:** Advertise for Bid

**Spring 2020:** Start of Construction

**Fall 2021:** Substantial Completion of Construction

Should you have any questions, please contact my office at (512) 974-6722.

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