

Project Scope & Description: Infrastructure Improvements to Reduce Flood Risks

Rebuilding or improving the roadway alone will not prevent future flood events from temporarily submerging Fallwell Lane but will dramatically reduce the risk of a total road failure due to bank failure. Preliminary engineering analysis resulted in an alternative that would leverage funds from the stakeholder departments into a single project that would:

- Provide access following a 100-year flood event by realigning a portion of Fallwell Lane.
- Stabilize a portion of the bank of the Colorado River to protect critical infrastructure and access.
- Relocate existing utilities away from the bank of the river to reduce damage caused by erosion.

Method of Project Selection

With the objective of developing holistic solutions benefiting multiple stakeholders, the City of Austin engaged with all affected stakeholders throughout project development. The primary stakeholders involved in the study process were:

- City of Austin Public Works Department (PWD);
- Austin Water (AW), including sub-departments at South Austin Regional (SAR) Wastewater Treatment Plant (WWTP);
- Austin Energy (AE), including sub-departments at both the Onion Creek Substation and the Sand Hill Energy Center (SHEC);
- Watershed Protection Department (WPD);
- Travis County; and
- Goveia Commercial Real Estate.

Stakeholder departments have already committed a total of approximately \$12.6 million for the \$22.6 million project proposed in this grant application. The CDBG-MIT application includes the first phase of a larger project. This first phase is viable as a stand-alone project. Over the next ten years, the City of Austin will implement approximately \$10 million in additional capital improvements to further reduce riverine and local flood risk to the project area. If the GLO awards the city the requested funds for this grant application, it will accelerate the construction of the highest priority elements of the planned improvements. The CDBG-MIT project using available funds would relocate the at-risk portion of Fallwell Lane to the south away from the Colorado River, improve the remaining portion of Fallwell Lane leading into the two facilities, install shoring along the Colorado River to protect the Onion Creek Substation from bank erosion, relocate at-risk water lines along Fallwell Lane, and improve the SHEC drainage outfalls integrating nature based solutions to minimize future erosion. Additional funding sources are displayed in the table below.

Table 1: Summary of Local Funding Sources

City Department	Source	Amount
Public Works	2016 Mobility Bond	\$1,006,395
Austin Water	Capital Projects Fund	\$4,922,314
Austin Energy	Capital Projects Fund	\$5,962,500
FEMA DR Grant 2015	FEMA	\$773,140

City Department	Source	Amount
Total Local Funding		\$12,664,349

The project process was developed through on-going communication with the identified stakeholders as shown below, which depicts the meeting sequence and respective results.

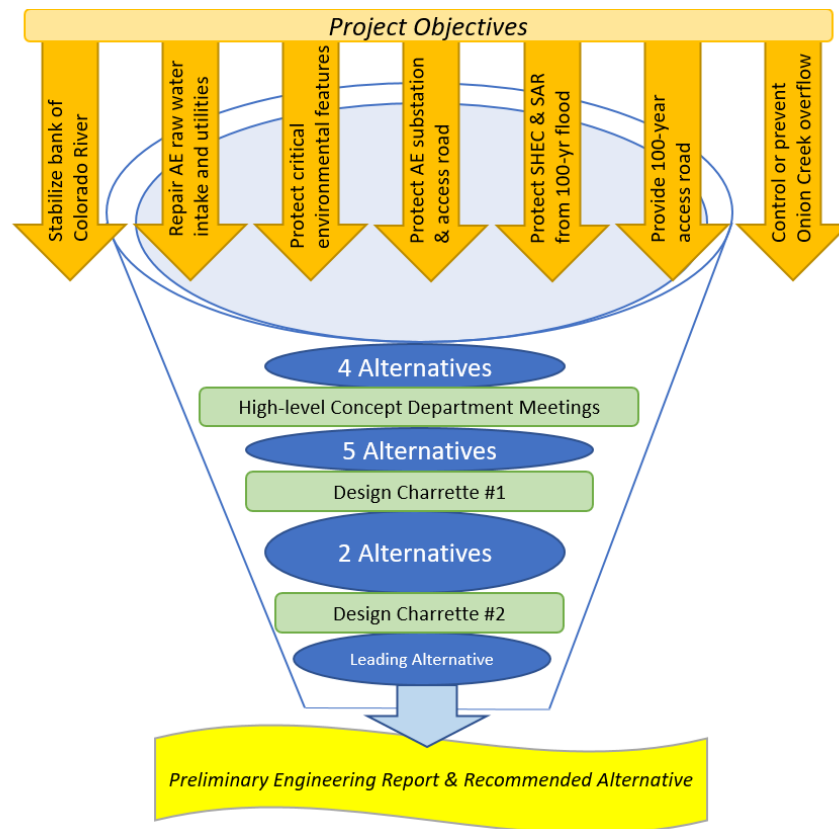


Figure 7: Fallwell Lane Alternatives Analysis Process

Upon completion of the evaluation matrix and through on-going stakeholder engagement, Alternative #3 with Fallwell Lane alignment C as discussed in the attached PER, was determined to be the recommended alternative solution. This alternative scored the highest of the alternatives, optimizes the project objectives and goals, and avoids negative impacts to upstream and downstream properties. It also allows for use of softer Colorado River streambank stabilization methods and does not require changes to existing utility plant access points or security.

At its current 30% design phase, Fallwell Lane Alignment C has been designed as a 32-foot wide pavement section. The proposed re-alignment of Fallwell Lane is on Parcel ID #295802, owned by GCRE/TX Austin Master LLC, and will require a 60-foot ROW acquisition (approximately 1.72 acres).

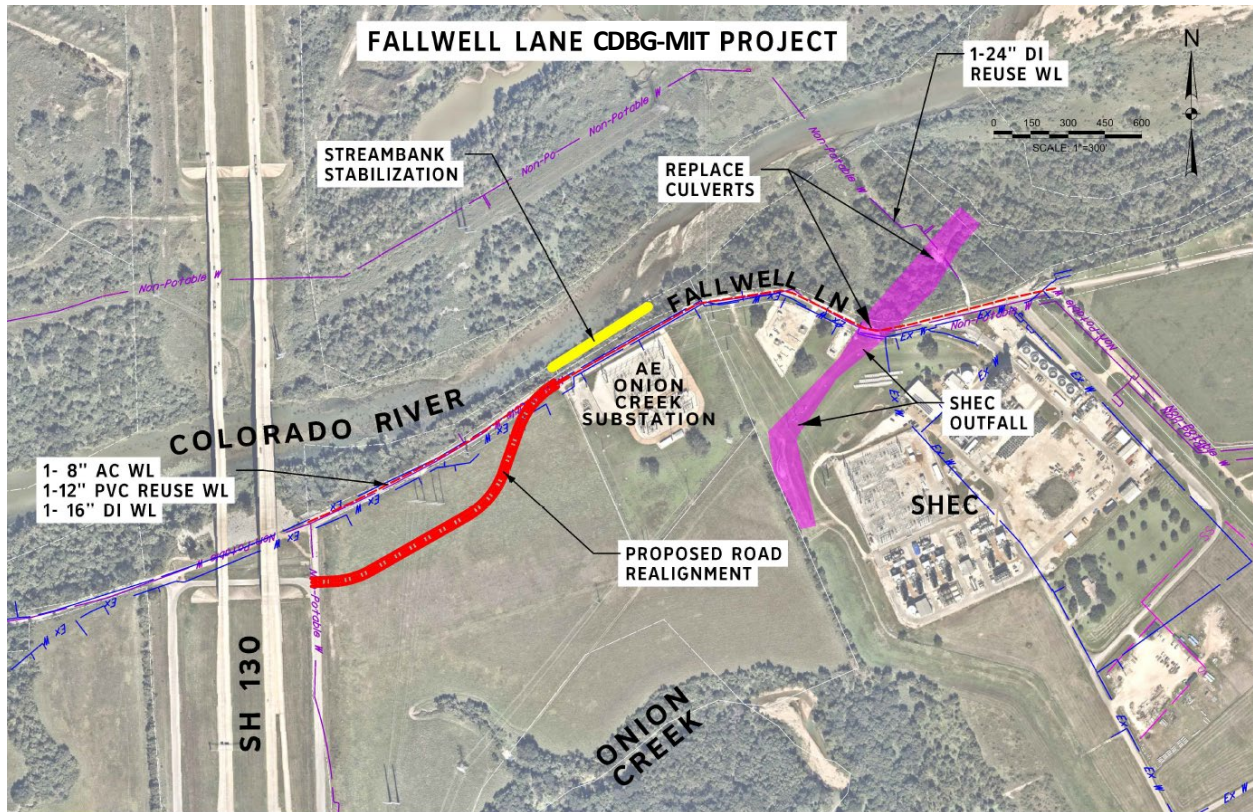


Figure 8: Fallwell Lane Proposed Project

As discussed in the PER, a structural engineering consultant evaluated two methods to stabilize the banks of the Colorado River. The first method consisted of a vertical, concrete soldier pile wall and the second consisted of a vegetated reinforced slope solution utilizing the patented Envirolok system. The recommendation in the Technical Memorandum included in the PER is a drilled pier wall solution due to its ability to nearly eliminate future bank erosion and risk of failure. For this CDBG-MIT application, the drilled pier wall has been truncated and re-aligned near the top of Colorado River bank to minimize floodplain and environmental impacts while providing protection to the adjacent City of Austin infrastructure (Austin Energy Onion Creek Substation, raw water intake facility, utilities, Fallwell Lane). Additionally, the drilled pier wall provides greater stability and is less expensive than the vegetative solution.