

Escondido Pipe Bridge Crossing



Meet Our Team

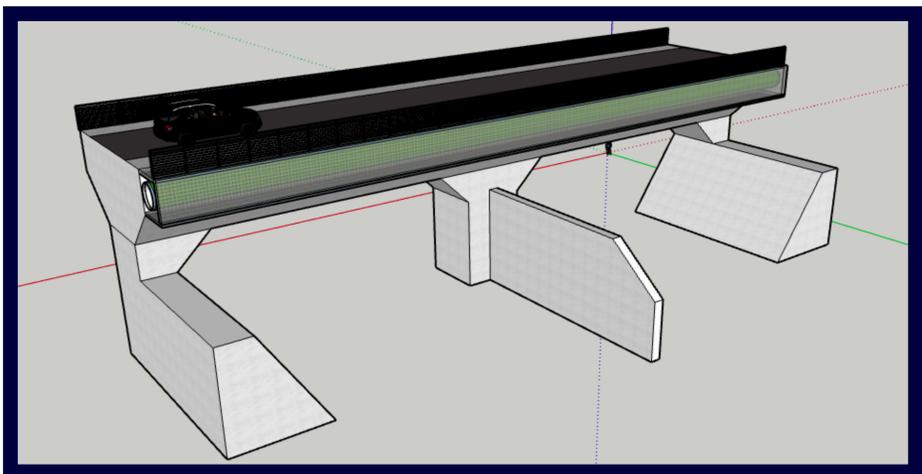
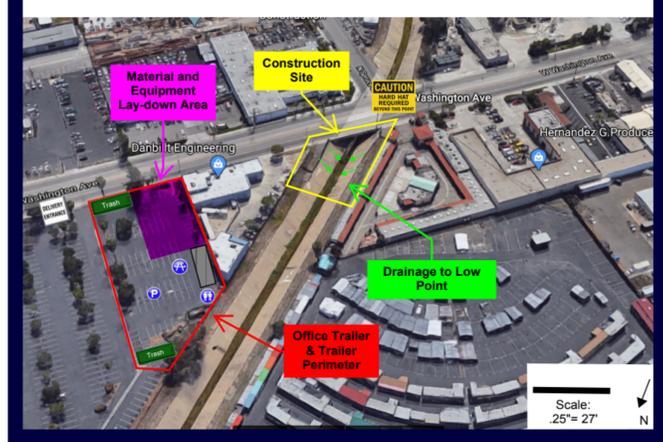
Thanks to our diverse team we will be able to create innovative, out of the box resolutions. Our team consists of our project manager, Tiffany Clonts, who also acts as one of our structural engineers. Next we have Allison Harizal, Caleb Mulick, and Charli Eiseler who make up the rest of our civil team. Combined they hold expertise in structural, geotechnical, and transportation engineering services. Lastly, is our construction engineers Arey Marquez and Madison Rumic. They gained experience from a multitude of construction projects around San Diego County, creating great relationships with owners and subcontractors.



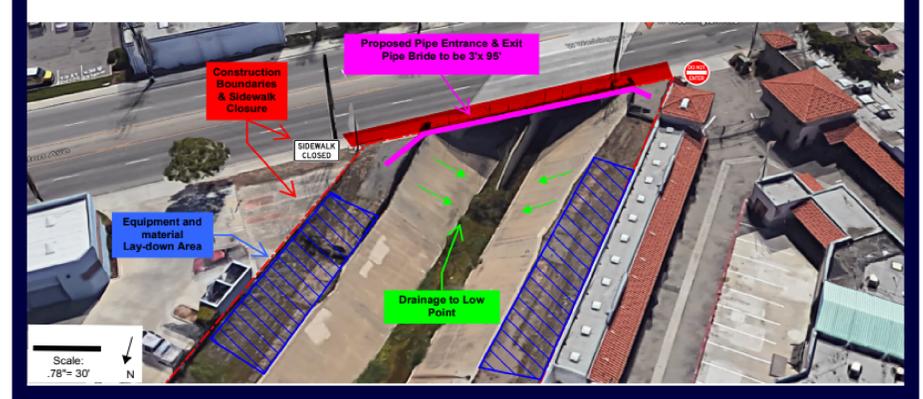
Project Overview

The City of Escondido is implementing a new pipeline to the existing Hale Avenue Resource Recovery Facility to provide treated wastewater to Avocado Farms. Avocado farms are a staple of the City of Escondido's economy, and because of this Parallel Pipes Construction has been working to determine and implement the most efficient way for the pipeline to cross Escondido Creek. The two alternatives that we have evaluated were to jack and bore underneath the creek to place the pipe, or to construct a pipe bridge. We determined that the alternative that was best suited to the needs of the City of Escondido and its citizens was to design and construct a pipe bridge that also serves as a pedestrian bridge. To do this, we plan on extending the existing sidewalk by 3 feet over the canal, and placing the pipe underneath this extension.

Overall Site Logistics Plan



Pipe Bridge Site Logistics Plan



Boring vs Bridge

With this project, we were given the option to determine whether the method of building a pipe bridge, or to jack and bore underneath the canal, would be the most effective means of crossing the pipe across the canal. After careful analysis of the soil below the ground surface, we examined that the granitic rock layer was going to cause a lot of issues. The rock would mean that we would have to use specialized temporary structures to keep water from coming through the cracks, multiple pumps to keep the water out, and a much stronger way to bore through the rock. All of these factors and expenses helped us conclude that the pipe bridge would be the better option. We would also provide a safer environment for the community by adding the extra width to the sidewalk.

