

CASESTUDY

DEC 2021



**HELICAL PILES SAVE TUCSON
PIPELINE DURING MONSOON
FLASH FLOODS**

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NEVERSETTLE



MONSOONAL FLASH FLOODS JEOPARDIZE TUCSON PIPELINE FOR MULTINATIONAL ENERGY INFRASTRUCTURE COMPANY

PROJECT BACKGROUND

Monsoon flash floods seasonally plague the deserts of Southern California and Arizona, and these flash floods don't slow down regardless of what's in front of them. Pipelines, no matter what they're transporting, are all but defenseless to flash floods, which can become problematic when we're talking about transporting petroleum based products. Several weeks ago an area of Tucson was hit with multiple monsoonal storms completely washing out several water channels, which jeopardized an active, 12" diameter pipeline.

PROJECT DESIGN PHASE

Having recently designed supports for this energy infrastructure company, the Dalinghaus Construction team was able to immediately mobilize for the soon to be pipeline emergency and build adequate supports for the areas of the pipeline that had already been washed out. Utilizing two TAF-288 helical piles with new construction caps, a 1" support bracket, and a 1/2" support strap the pipeline would be moved several inches off the surface soils and be fully supported by the helicals driven to competent, load-bearing strata. Regardless of what happened to the soils directly beneath the pipeline it would now be supported and stabilized.

DALINGHAUS SOLUTION

Once the plans were designed and approved with the ECP TAF-288 helical piles our team was able to mobilize to an area on the outskirts of Tucson to install the 14 helical piles. After arriving on site the crew found a mixture of some of the flooded locations drying out while others were still very much flooded. In just a single shift the crew had all 14 helical piles installed to competent, load-bearing strata which was at about 22' beneath the soils surface on average. After the piers were driven the supporting bracket & strap were installed and the pipeline was lifted off the soil.

In just a day our team at Dalinghaus Construction was able to help stabilize a pipeline and mitigate an emergency caused by monsoonal flashfloods.

INSTALLATION OVERVIEW

TOTAL HELICAL PIERS

14

HELICAL PRODUCT

TAF-288

PRODUCT MANUFACTURER

EARTH CONTACT PRODUCTS (ECP)



"Never Settle"

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