

SoFi Stadium

Inglewood, California

Caissons

Owner:

Hollywood Park Land Co.

Engineer:

HKS, Inc.

Contractor:

Turner-Hunt LA Joint Venture & Kiewit
Infrastructure West Co.

Installation:

2019



The Hollywood Park Racetrack, located in Inglewood, California, unveiled its inaugural horse racetrack in 1938. The park provided entertainment to both residents and visitors for decades, ultimately closing its doors in 2014 and taking its place as the most famous among dozens of racetracks shuttered in the last 25 years. While the racetrack was well known for its derby track, racing in Southern California had become largely concentrated in Santa Anita and with events and attendance waning, it only made sense for Hollywood Racetrack to eventually shut down and pave the way for something new.

Within the following year of its closure, demolition of the track began in preparation for a new stadium that would come to be known as the SoFi Stadium, centrally located and only three miles from the Los Angeles International Airport. The stadium was designed by HKS and included a large, indoor stadium, a pedestrian plaza, and a performance venue.

In order to construct such a massive stadium in a location known for its frequent seismic activity, special foundation design consideration was required. Ultimately, the main structural elements of the stadium foundation were designed and

Technical Description:

- Product: HEL-COR® CSP 3x1 , 10 GA Caissons
- Diameter(s): 96-inch and 108-inch (additional diameters included 30, 42, and 54-inch)
- Length(s): 13,000 LF of 96" and 108" 12,000 LF of 30", 42" and 54"



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constructed similar to a bridge on rollers, so that it could “free float” and move independent of the surrounding soil in the event of an earthquake. In order to construct such a foundation, large diameter caissons were needed. The contracting company hired for the project, Kiewit Infrastructure West, was able to work with Contech Engineered Solutions to provide this unique foundation system. Contech manufactured large diameter, heavy gage HEL-COR® caissons to function as a casing/airgap between the structural concrete support columns and backfill, often referred to as “isolation casings”.



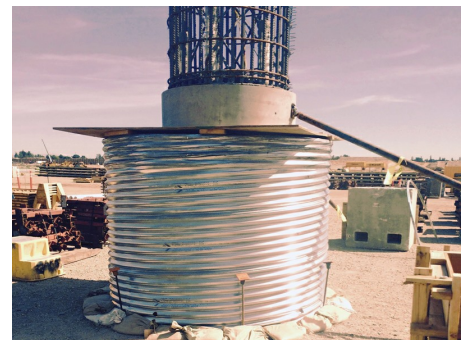
Due to design-build nature of the project, requirements changed daily, and Contech remained responsive to the fast-paced demands of the contractor. Ultimately, the completed foundation included 13,000 LF of 96-inch and 108-inch diameter and an additional 12,000 LF of 30-inch, 42-inch, and 54-inch HEL-COR® CSP caissons. The 10 GA, 3x1 profile of the HEL-COR caissons met the design requirements, accommodating the heavy loading conditions due to the casing depths. Many of the support columns were up to 100' in height. Additionally, Contech assisted with a unique coupling band design (10-C bands w/ rod & lug connections) that allowed the casings to be stacked vertically – the first time this method had been used in Contech history. The 3x1 HEL-COR pipes were rerolled with 3x1 corrugations [versus 2-2/3 x 1/2 corrugations] which provided a better fit-up and a stronger band connection.



The construction schedule was extremely tight, made even tighter with extensive rain delays, which led to many challenges on the production side to meet daily material demands. Contech was able to handle rapidly, using several nearby Contech manufacturing facilities to address the needs of the project. Another key advantage with the prolonged manufacturing demands was the utilization of the MOBILE PIPE® mill, a mobile production vehicle that provides fast and cost effective on-site steel pipe manufacturing. MOBILE PIPE® is designed to be a self-supporting factory that can be quickly deployed and put into production. It provided to be the lynchpin in the success to maintain the tight construction deadlines.



The transformation of the 300-acre Hollywood Park was a success. Ultimately completed in time to host Super Bowl LVI, the location now known endearingly as the SoFi Stadium is home to the Los Angeles Rams and the Los Angeles Chargers.



The final entertainment indoor stadium is able to seat 70,240 spectators in the Los Angeles suburb of Inglewood, California, United States and has won a number of industry awards for its unique design.

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