



## Adventure Aquarium

### Acquatic Exhibit Building

#### Location

Camden, New Jersey

#### Client

New Jersey Sports and  
Exposition Authority

#### Client Type

Hospitality

#### Size

100,000 sf

PS&S provided structural engineering for the 3-story, 100,000 sf aquatic exhibit building, including 750,000 gallon tank and fabric roof structures, plus 2 acre outdoor exhibit area. Cast-in-place concrete frame supported on pile foundations.

PS&S also provided all geotechnical engineering services on this project, ranging from the soils and foundation investigation, design and preparation of construction documents for surcharging, to resident engineering inspection.

The Aquarium, which encompasses approximately 120,000 sf, is located on the Delaware River waterfront opposite Penn's Landing in Philadelphia. In order to bypass loose superficial fills and shallow soft organic deposits, 100-ton capacity 12.75-inch-diameter concrete-filled pipe piles were installed to support the structure. A total of approximately 830 piles were driven to average depths of 70 feet. PS&S provided resident inspection of the pile load test program and installation of the production piles.

For the outdoor marine exhibits (large tanks), up to 15 feet of compacted fill was placed to achieve design grades and then surcharged to pre-consolidate the compressible organic deposits. Our representatives observed the placement of the earthwork and surcharge. Additionally, we monitored settlement platform and piezometers to determine when the surcharge could be removed.



Architect: Hillier Group

