



## Project Description

Waterfront development centrally situated on the Potomac River and adjacent to the National Mall. The 1.9 million sf. Phase 1 of The Wharf development includes:

- Two residential buildings
- 175,000 square feet of retail
- 11-story, class-A office building
- 2-story below-grade parking garage

## Design Features:

- Slab Edge & Crane shoring.
- Design a shoring system to support a 500 ft long by 20 ft wide crane road on top of the plaza level slab.
- Extensive timber sill plates over the slab on grade to spread the load to the subgrade.



Washington, D.C

## CAPABILITIES

- **Construction Services**

Developer:

**Hoffman-Madison Waterfront**

Architect:

**Perkins Eastman**

General Contractor:

**Clark Construction Group**

Project completion:

**Phase 1 in 2017**

Industry

**Mixed-Use**

Project type:

**NEW CONSTRUCTION**

## Full Project Description

The Wharf is a multi-billion-dollar mixed-use development on the Southwest Waterfront in Washington, D.C. The mile-long waterfront neighborhood is centrally situated on the Potomac River and is adjacent to the National Mall and within walking distance of major commerce.

Phase 1 of The Wharf development opened in 2017 with a building area of more than 1.9 million square feet. It includes two residential buildings with 620 apartments and 290 condominiums; 175,000 square feet of retail; an 11-story, class-A office building; a two below-grade levels parking garage; and three hotels. Once built out by 2022, it will comprise 3.2 million square feet of residential, office, hotel, retail, cultural, and public uses, including waterfront parks, promenades, piers, and docks.

Kline Engineering role in The Wharf- Phase 1 project was to design a shoring system to support a 500 ft long by 20 ft wide crane road on top of the plaza level slab.

The plaza level slab is an elevated slab built above a two-level parking garage. Without shoring the slab would not be able to support the weight of the massive 300-ton crawler crane that was used to erect the structural steel for the buildings. Shoring was extensive and consisted of a hybrid system of towers and supplementary posts. Extensive timber sill plates over the slab on grade spread the load to the subgrade.

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