

South Park Bridge

Seattle, WA



Old Structure Insufficient

The first South Park Bridge was opened in 1931, but in 2010 it was closed due to severe deterioration, vulnerability to earthquakes, susceptibility to settlement and potential tilting and cracking of the main piers. The mechanical and electrical systems that operated the bridge were unreliable and required repairs frequently.

New Structure Designed

The new South Park Bridge in Seattle was built to meet current structural, seismic, and traffic standards. The bridge, which spans the Duwamish Waterway, contains bicycle lanes, and the sidewalks on the bridge are separated from the roadway by a traffic rail. The bridge carries up to 20,000 vehicles daily with 14% being truck traffic.

The moveable spans of the new 1300 foot long bridge have a solid deck rather than open steel grating, which will capture roadway runoff and direct it to rain gardens. The concrete deck also provides better traction. Epoxy-coated reinforcing steel (ECR rebar) is used extensively throughout the bridge including the deck and piers for corrosion protection.

Team

Owner:

King County

General Contractor:

Kiewit-Massman

Design Criteria:

- Replace bridge and meet current structural, seismic, and traffic standards.
- Include separated bicycle and pedestrian access.
- Utilize a concrete deck for improved traction.

Total Project Cost:

\$162 million

Total Size:

LENGTH: 1300 ft

WIDTH: 66 ft

Epoxy-coated Reinforcing Steel:

900 tons

Photography:

djc.com

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