

Why Replace the Viaduct?

- Airport Way S viaduct was originally constructed in 1928 and was rehabilitated in 1982
- The timber approach structures of the viaduct are deteriorating and need to be replaced
- Seismic deficiencies have been identified in the mainspan of the deck
- Results of geotechnical reports indicate poor soil conditions
- Improvements to the structure will meet the City's seismic codes and standards, ensuring the viaduct is able to withstand large earthquake events



Images of north approach

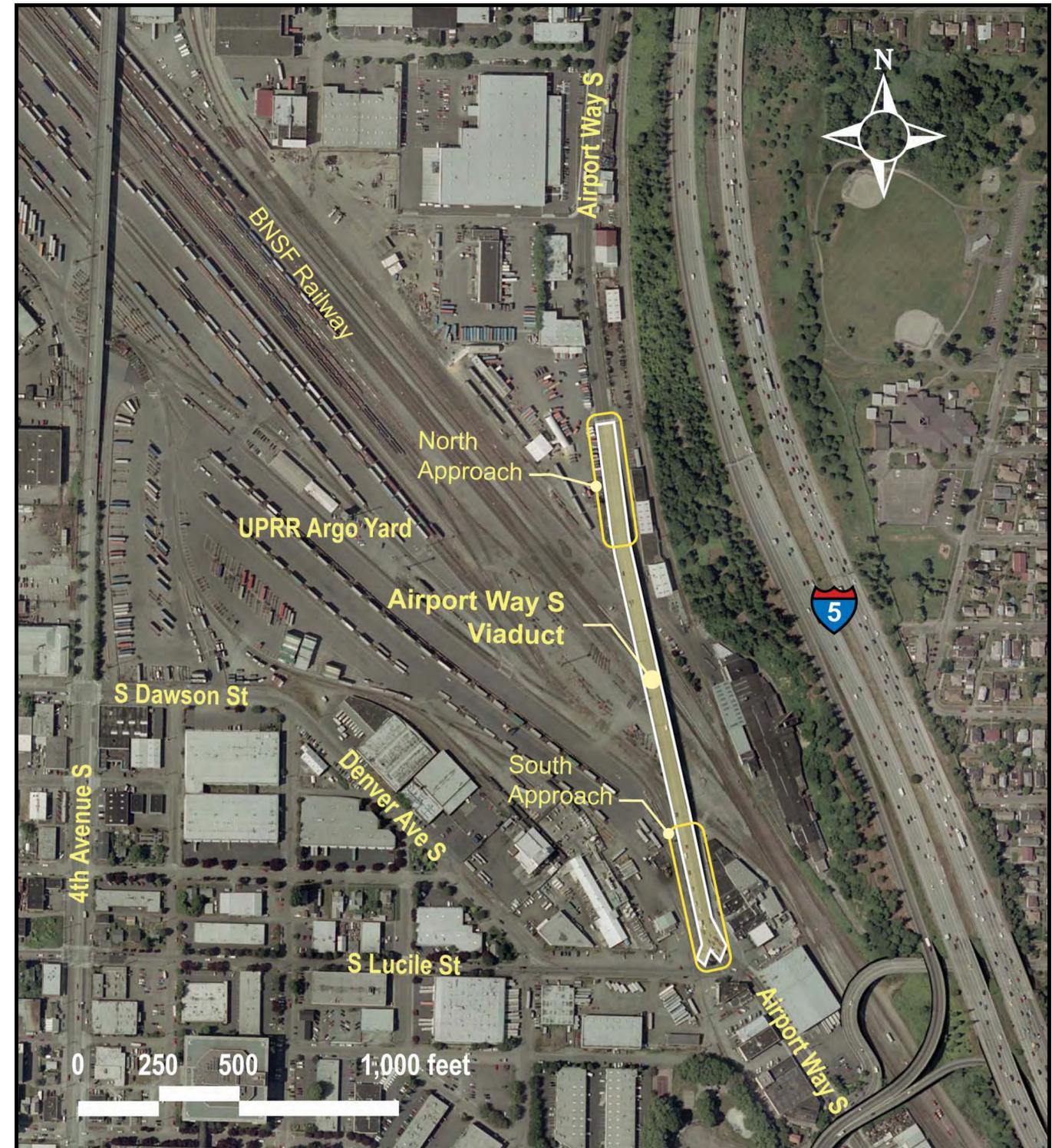


Images of south approach

Project Area

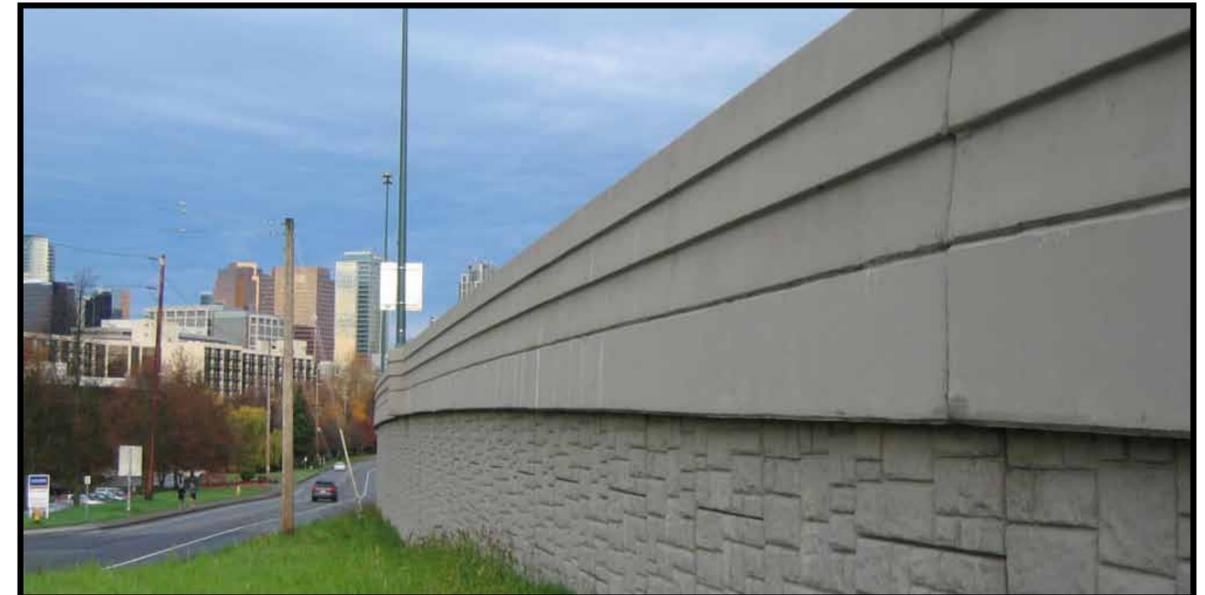
- The Airport Way S viaduct is a major thoroughfare in South Seattle and a vital link in the central Puget Sound region's freight mobility network
- An average of approximately 13,600 vehicles use the viaduct each day*
- An average of approximately 1,900 heavy vehicles use the viaduct each day*
- 3 King County Metro bus routes travel on the viaduct (Routes 106, 131, 134)
- Several businesses are located along Airport Way S, between S Lucile Street and S Industrial Way

**Traffic results compiled in September 2008*



What is Included in the Project?

- Replacement of the north and south timber approach structure with a mechanically stabilized earth (MSE) wall structure
- Ground improvements to address poor soil conditions at the approaches
- Mainspan rehabilitation to remove and replace existing concrete deck girders; existing steel girders will not be replaced
- Seismic improvements to the mainspan of the viaduct



Rendition of mechanically stabilized earth (MSE) retaining wall



Under mainspan looking south



South approach of Airport Way S viaduct

Project Schedule

SDOT is planning to close the viaduct in early 2011 to replace the north and south timber approaches as well as rehabilitate portions of the mainspan. SDOT decided to fully close the viaduct during construction after seismic deficiencies were identified in the mainspan of the deck and after having consulted with local community groups and businesses.

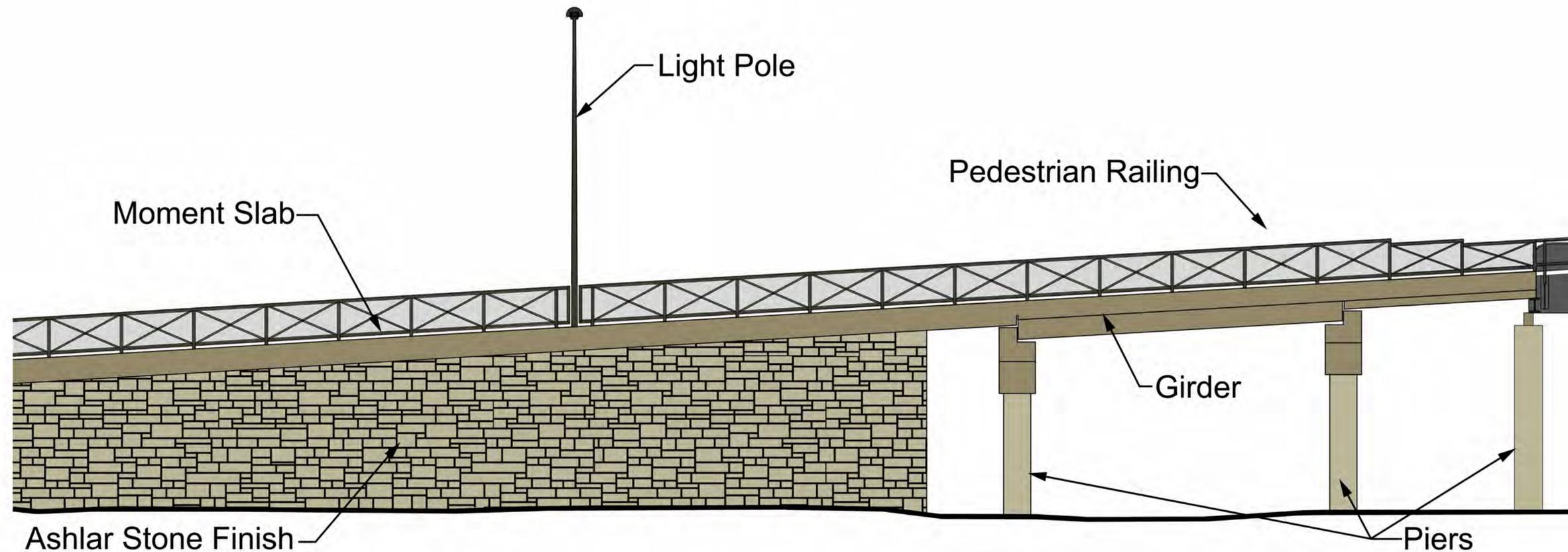
	2010				2011				2012		
	Jan. - March	April - June	July - Sept.	Oct. - Dec.	Jan. - March	April - June	July - Sept.	Oct. - Dec.	Jan. - March	April - June	July - Sept.
Design											
Construction											

Design phase Construction phase

Schedule is based upon consideration of:

- Addition of mainspan retrofit and rehabilitation work
- Railroad’s “No Construction” holiday window from October 1 to January 1
- Standard 5 day construction work week and work hours

Architectural Finishes



Architectural Basis

Ped/Bike Railing

- High architectural interest
- Fits with architectural style of existing railing over mid span
- Provides transition from one railing type to another

Wall

- Fits with the historic character of the neighborhood
- Works well with MSE wall system since panel joints blend in with the pattern

Colors

- Warm colors to enhance the built urban environment of the bridge
- Neutral colors to fit with the existing surrounding environment
- 3 colors to provide architectural interest

Lights

- New light fixtures to match the existing light fixtures
- Both new and existing light poles to be painted with the same color as the railing for cohesive appearance of the bridge



Ashlar Stone Finish

Construction Detour Plan



- Airport Way S viaduct will be closed during construction for 12 – 14 months
- No pedestrian, bicycle or vehicle access will be permitted

- Local traffic will be detoured onto 4th Avenue S
- Signage will be placed throughout the region to alert corridor users of detour routes

Legend	
	Construction area
	Southbound traffic
	Northbound traffic

Regional Construction Detour Plan

