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Viaduct vision calls for open tunnel with lids

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The Alaskan Way Viaduct is one of the constants in the life of 51-year-old Charles Anderson. The landscape architect has been looking at the viaduct for the last 24 years from his desk in Pioneer Square.

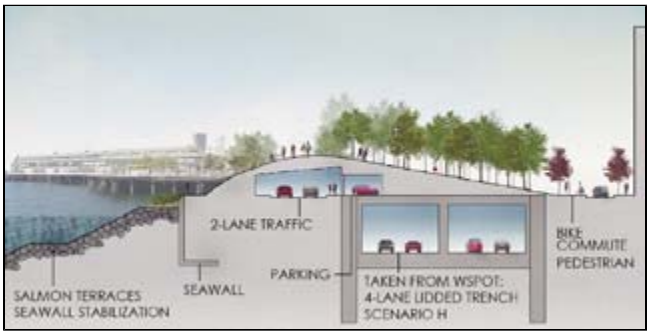

Image courtesy Charles Anderson Landscape Architecture [enlarge]

Landscape architect Charles Anderson says putting the viaduct into an open-topped tunnel would allow parks and plazas to be built on lids above the tunnel, as money became available.

But these days, when Anderson looks out his window, he doesn't see the viaduct. He sees rolling hills descending from downtown Seattle to a waterfront that is full of sea life, a series of parks and plazas, and a vibrant pedestrian-friendly space.

And the cars? They would go into an open-topped tunnel, something like the “lidded trench” proposed by the Alaskan Way Viaduct project team.

Anderson's tunnel, however, would be partially covered with parks and other people-friendly spaces. The hills could be terraced, and each one would be different.

He said such a design would be much more walkable and welcoming in rainy Seattle than the open promenades proposed by the viaduct project team. “In our climate, the idea of protection, comfort .. is really nice.”

The lids over the tunnel could be built in stages, as funding materialized.

“It's an open tablet for future development but you don't have to pay for it until you're ready,” Anderson said.

But such a tunnel would be very expensive to build even before you started covering it, according to Alec Williamson, design engineering manager for the viaduct. The tunnel would have to be super-strong to support lids made of soil. Wet soil is very heavy, Williamson said.

“It's an extreme engineering challenge to support that kind of weight so your structure below has to be much more robust,” Williamson said.

Unlidded sections of tunnel would also be noisy, he said.

In his proposal, Anderson also wants to put terraced boulders along the central waterfront to invite salmon back and stabilize the deteriorating seawall. The only way to restore habitat to the waterfront is to create it offshore, Anderson said.

Engineers built rock terraces along the seawall in front of the Olympic Sculpture Park and that has encouraged the growth of bull kelp, said Anderson, who designed the gardens for that park. “We've created a forest out there.”

Those rock terraces also helped shore up the seawall.

Project Manager Jon Arnesen of the Seattle Department of Transportation said he doesn't think rock terraces won't work on most of the central waterfront. “You'd create shallow water and you wouldn't be able to bring vessels in.”

It might be possible, however, to create such habitat at Pier 48 and at Piers 62 and 63, Arnesen said.

The state owns Pier 48. Seattle Parks owns 62 and 63.

Arnesan said the seawall along the central waterfront would still have to be replaced, however. It is holding back much more infrastructure than the seawall by the sculpture park. He also said the soil on the central waterfront is not as stable.

It will cost between $410 million and $540 million to replace the seawall between Washington and Broad streets, according to new cost estimates from SDOT. That's lower than SDOT's 2005 cost estimates of $600 million to $800 million.

Additional design work helped bring the costs down, Arnesen said. Also, engineers found better soil than they expected between Pine and Broad streets.

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