

## PUBLIC COMMENTS FOR IBR EXECUTIVE STEERING GROUP

*Received between October 21, 2024 and March 6, 2025*

Comment Received: 10/21/2024

From: Chris Smith

Email Subject: ESG Public Comment

Attachment Included: No

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It should be no surprise that you had no public comment during today's ESG meeting.

There is no Zoom link or dial-in number on the meeting web page, in the agenda or in the presentation slides.

If I had in fact I had been able to testify I would have noted that a significant equity issue is arising around tolling the project.

The EMAC committee that ODOT had chartered to look at equity issues in tolling produced a very strong recommendation for a low-income toll discount.

But the scenarios that the joint subcommittee of the two Transportation Commissions have approved for Level 3 analysis includes two scenarios for this discount:

- 1) Don't provide a discount until the bridge opens (i.e., no discount for nearly six years of pre-completion tolling)
- 2) Implement a discount "as soon as practical" (i.e., no discount at inception of tolling)

To meet the equity objectives of this project a low-income discount needs to be in place from the moment tolling commences.

Thank you.

Chris Smith  
Just Crossing Alliance

Comment Received: 03/04/2025

From: Bob Ortblad

Email Subject: ESG Public Comment

Attachment Included: Yes (3), page 3 – 5

*\*ADA compliant versions of the attachments can be made available upon request*

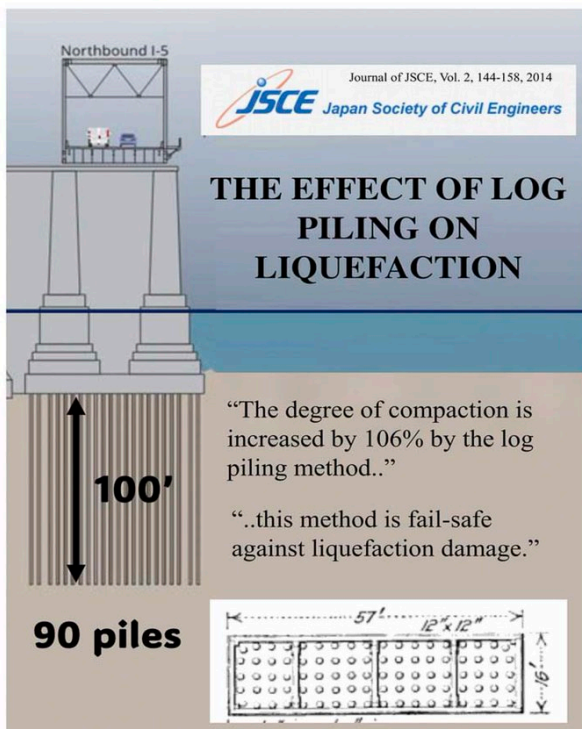
ESG Public Comment, meeting March 6, 2025

IBR Executive Steering Group (ESG)

Respectfully

Bob Ortblad MSCE, MBA

**Showa Bridge Niigata, Japan 1964**

Journal of JSCE, Vol. 2, 144-158, 2014  
**JSCE** Japan Society of Civil Engineers

**THE EFFECT OF LOG PILING ON LIQUEFACTION**

“The degree of compaction is increased by 106% by the log piling method..”

“..this method is fail-safe against liquefaction damage.”

100'

90 piles

57' 12" x 12" x 16"



# Geotechnical Data Report

## Columbia River & North Portland Harbor Bridges

May 2024

## **Bob Ortblad reports that the IBR's Supplemental Environmental Impact Statement includes 26 technical reports, but a critically important geotechnical report is missing, and the IBR has offered no explanation**

*Editor's note: Opinions expressed in this letter to the editor are those of the author alone and do not reflect the editorial position of ClarkCountyToday.com*

The Interstate Bridge Replacement Program (IBR) is hiding a serious “boulder” problem that threatens the feasibility of the IBR's Columbia River bridge design. IBR's Supplemental Environmental Impact Statement includes 26 technical reports, but a critically important geotechnical report is missing, and the IBR has offered no explanation. I filed a Public Disclosure Request and obtained IBR's “Geotechnical Data Report” dated May 2024.

The IBR plans to support its bridge with a dozen piers. Each pier will need eight supporting shafts for a total of 96 in-river shafts. These shafts will be steel pipe piles 10-foot in diameter and up to 250 feet long. IBR plans to use a giant oscillating machine to twist piles back and forth, sinking them into about 200 feet of sandy sediment down to a solid Troutdale Formation.

IBR's “Geotechnical Data Report” describes the encounter of many boulders and cobbles in a 200-foot layer of sediment. The report referenced boulders 106 times and cobbles 175 times. In 2012, the Columbia River Crossing spent \$4.2 million to test a few piles and a single shaft. Malcolm Drilling Co. tried to sink a single 10-foot diameter steel casing down 250 feet on Hayden Island. In a trade journal, Malcolm Drilling recounted its failure to sink this test shaft due to boulders.



Bob Ortblad

### **“The Columbia River Crossing Test Program,” 2013**

“However, during excavation and casing installation of the 10- foot diameter shafts, an unknown layer of very dense boulders in a “fixed condition,” resulted in damage to an installation tooth ring to the point that excavation to the planned shaft depth was impossible.”

IBR also plans to install 1,775 temporary 24-inch and 48-inch inriver piles to support a giant oscillating machine as it tries to sink 96 in-river 10-foot diameter shafts.

In 2012, each shaft was estimated to cost \$1.25 million. Today, each shaft will cost \$2.5 million. If many boulders are encountered the cost per shaft could soar even higher. The cost of bridge drilled shafts is very unpredictable ranging from \$250 million to \$500 million.

An Immersed Tunnel alternative that the IBR has fraudulently disqualified needs no drilled shafts saving up to \$500 million. An Immersed Tunnel is supported by the displacement of its weight similar to a floating bridge.

**Bob Ortblad MSCE, MBA**  
Seattle, WA

## Letter: 'IBR's seismic lie'

### **Engineer Bob Ortblad claims the Interstate Bridge Replacement Program is misrepresenting the risk of the current I-5 bridges collapsing during an earthquake**

The Interstate Bridge Replacement Program (IBR) is misrepresenting the risk of the current I-5 bridges collapsing during an earthquake.

The IBR claims that liquefaction will cause the I-5 bridges to fail, similar to the Niigata Bridge in Japan, which had only nine 52-foot-long, widely spaced piles per pier. In contrast, the I-5 bridges have 100-foot-long, tightly spaced wood piles (90 per pier) that compact the soil, making them resistant to liquefaction.

A Japanese study has demonstrated that closely spaced wood piles enhance soil compaction and serve as a "fail-safe against liquefaction damage." The IBR plans to use only six drilled shafts per pier, which will not effectively improve soil compaction. Additionally, the IBR's bridge design may be less resilient to earthquakes than the current I-5 bridges. The IBR's bridge trusses will be twice as long, twice as wide, fifty feet higher, and five times heavier. Its 120-foot piers will rest on only six drilled shafts (up to 250 feet long) in uncompacted soil.



*Bob Ortblad*

The increased weight and height of the IBR bridge, combined with its support on uncompacted soil, may make it less resilient than the current bridges during an earthquake. Resilience is defined as the capacity to withstand or quickly recover from damage. Consequently, repairing any earthquake-induced damage to the existing bridges would be much faster than repairing a significantly larger and heavier IBR bridge.

**Bob Ortblad MSCE, MBA**  
*Seattle*