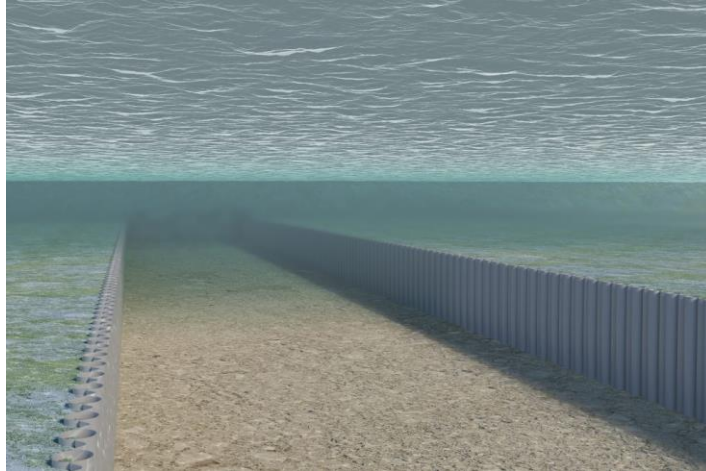


An Immersed Tube Tunnel is being built in Vancouver BC for a cost of 3.2 billion US dollars to be completed in 2030. The Columbia River is very similar to the Fraser River and an Immersed Tube Tunnel would be much cheaper than the high bridge IBR Preferred Alternative.



The HWY 99 tunnel construction under the Fraser River is comparable to the Columbia River over Hayden Island to Vancouver Washington.



Dredging on the floor of the river is done and reinforced with a retaining wall.



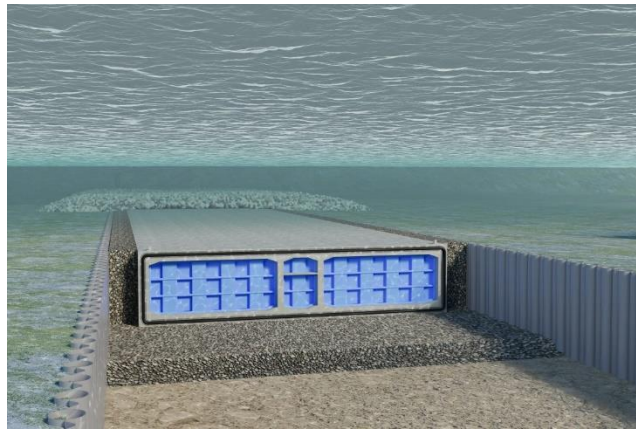
Next step is the construction of several 450-foot-long segments in a dry dock away from the bridge site.



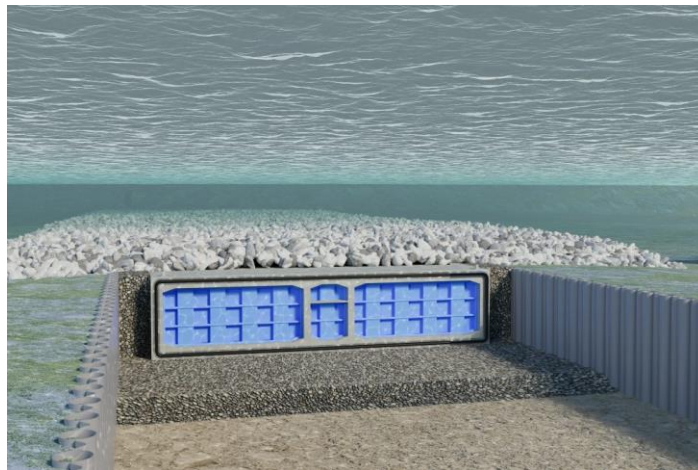
These 450 long segments are then floated to the middle of the river



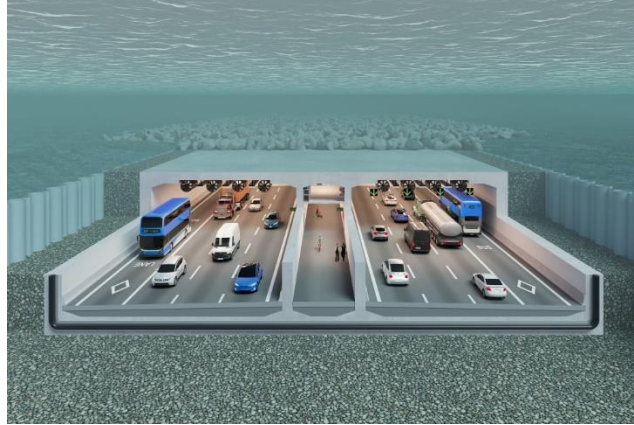
Then lowered in place.



A cushion of rock is placed around the tube for stability and seismic movement



The tube is covered over the top to maintain a depth of 43 feet for river channel clearance.



Highway 99 traffic needs two HOV lanes, six traffic lanes plus a passageway for bicycles, pedestrians and rollers. **No tolls will be required .**