





# **Pattullo Bridge Replacement Project**

# Bridge foundation construction

# **About the Pattullo Bridge Replacement Project**

The new four-lane, toll-free bridge will provide important safety and reliability improvements for people who are driving, cycling or walking, as well as communities on either side of the bridge. The new bridge is scheduled to open in 2024. Once the new bridge is open, the existing bridge will be removed.

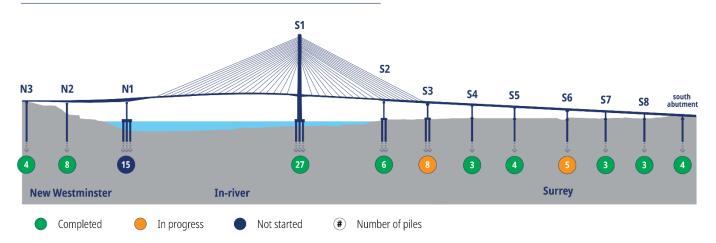
## Pile installation for main bridge foundations

Work on the new Pattullo Bridge replacement is progressing. Bridge foundation work is underway and pile driving is complete for the foundation that will support the main tower (S1 in the illustration below). Work on the second inriver foundation (N1) will begin this summer.

In New Westminster, pile installation for the main bridge foundations is complete. A drilled shaft methodology was used instead of intermittent pile driving, to minimize noise and vibration for nearby residents.

In Surrey, pile driving is underway or complete on all foundations. This work is intermittent, as crews drive a steel pile into the ground, then stop to weld another steel pile section onto the driven pile, and then start up again until the pile reaches the required depth.

## **Pattullo Bridge Replacement Pile Installation Progress**



#### **Contact the Project**



**24/7 Construction Information Line** 1-844-815-6149





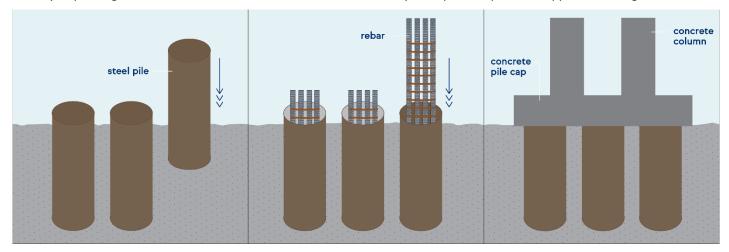




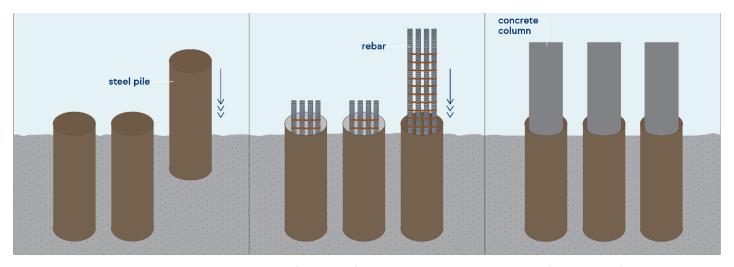


## **Building the foundations**

After the steel pile is driven or drilled into the ground, it is filled with rebar, followed by concrete to fill and "plug" the pile. There are two ways to continue from this point – either to pour another layer of concrete to cap the pile, or proceed directly to pouring concrete columns that are filled with rebar directly on top of the piles, to support the bridge deck.



A pile cap is used on the S1 main tower foundation as well as piers N1, N3, S2 and S3. On pier N3, structural steel columns extend from bearing pedestals which sit directly on the pile cap.



Concrete columns will be poured directly on top of the piles for piers N2, S4, S5, S6, S7, S8 and foundations for the Highway 17 off-ramp in Surrey.

## **Contact the Project**







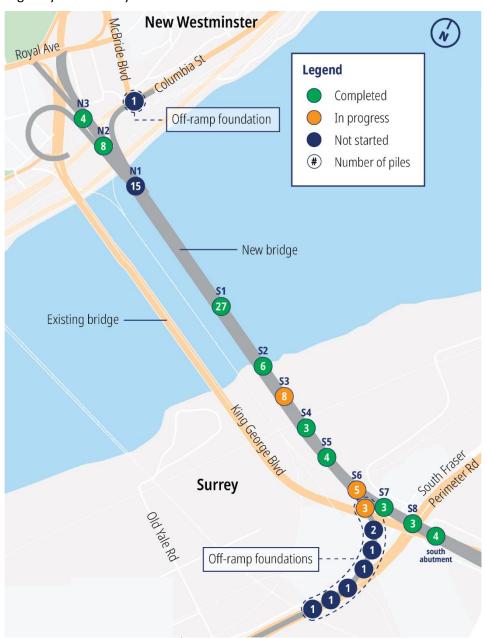






## Foundations for off-ramps in New Westminster and Surrey

In addition to the main bridge foundations, eight off-ramp foundations are being built – one in New Westminster near the McBride Boulevard-East Columbia Street intersection, and seven for the off-ramp between the bridge and Highway 17 in Surrey.



## **Contact the Project**









