



The 2000 tonne site-cast tunnel ready for the push. ➤

Throughout the entire project, CP Rail operated as usual, although during the 11-day "push", the trains running overhead were slowed to 35 MPH. Movements of soil in the embankment were monitored constantly, as were the railway tracks and the two existing arches adjacent to the new structure. With a further nod to late 20th century technology, a laser beam was used to pinpoint the exact alignment.

The tunnelling technique proved excellent for accuracy of alignment, minimizing settlement, and speed of construction, proving once again the versatility of reinforced concrete.



11 days later the tunnel is ▲ through the embankment.

**Credits:**

- Owner: Metropolitan Toronto Transportation Department
- Consulting Engineers: Delcan Corporation
- Sub Consultant: Cementation Company (Canada) Limited
- Contractor: Mathews Contracting Inc.



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