A tunnelling machine trapped near Old Mill cost the city $25 million to rescue. Now it may end up causing housing prices to increase

By Mahdis HabibiniaCity Hall Bureau Jan. 28, 2026

The little digger that couldn't may finally be free, but its legacy could complicate things for developers and builders in Toronto, who are warning of higher housing costs as a result.

A tunnelling machine that was trapped underground for months near Old Mill while digging a sewer sparked a complicated, multimillion-dollar rescue in 2023 — and is now the subject of a city report that may recommend banning the widely used construction method that ensnared the ill-fated borer.

While grinding a 282-metre tunnel through the ground under Old Mill Drive, the five-foot-long machine became ensnared in "tie-backs," steel cables used to build the foundation of a nearby condo.

According to another report commissioned by two Ontario builders associations and released Wednesday, the city is eyeing restrictions — including a ban — on the use of tie-backs — which are a cheap, fast way of constructing foundations and widely used by GTA developers. The builders are releasing their own report to get ahead of any criticism of the procedure in the impending city report.

The city confirmed that it is reviewing how tie-backs are used in Toronto, and any recommendations will go to city council's executive committee later this year.

Builders object to ban

A ban or restriction would be a mistake, according to the builders' report, leaving workers with no option but to use more expensive construction methods that would result in higher prices for high-rise residential buildings — plus longer sidewalk and lane closures.

"We don't want a knee-jerk reaction, making an (engineering standard) change and then all of a sudden: massive implications to construction costs for housing, massive implications to timelines," said Paul De Berardis, vice-president of building standards

and engineering at the Residential Construction Council of Ontario (RESCON), in an interview.

Wednesday's report was commissioned by RESCON and the Ontario Association of Foundation Specialists (OAFS). In it, Toronto-based consulting firm Isherwood Geostructural Engineers outlines why common alternatives to tie-backs would make projects more expensive and worsen Toronto's traffic.

Tie-backs became common in construction projects after their introduction to Toronto's market in the 1970s. They are installed underground on deep excavations to stabilize foundation walls from outside the work area and to prevent the weight of soil and water from collapsing or moving the structure being built while protecting nearby buildings.

Wednesday's report says that the most common alternatives to tie-backs — thick beams or pipes known as steel braces — make projects messier, costlier and more labour-intensive since they have to be installed inside the work area. By nature of their length and bulkiness, they need extra staging space and public lane closures.

According to the report, a high-rise residential building with a $13-million foundation built over 16 months using tie-backs would cost as much as $6.5 million more and take up to seven months longer if steel braces were used.

RESCON's De Berardis said those cost increases would instead trickle down to residents and inevitably mean higher rents and unit purchases for all new high-rise multi-unit residential buildings including market condos, rentals, non-profit housing, inclusionary zoning projects and city-led affordable developments.

The report says that tie-backs are the most effective way of supporting foundation walls during deep excavation in cities, unless something restricts their use, such as pipes, sewers or electrical lines. The report estimates more than two million have been installed "safely" in the GTA over the past 50 years.

"So, the city is reacting to an extremely (rare) possibility" that they caused with a "short-sighted" solution, said Peter Smith, executive director at the Ontario Association of Foundation Specialists (OAFS), in an interview referring to the stuck borer at Old Mill.

Smith said that in his decades-long tenure in the construction sector, he doesn't recall a similar such incident in Ontario.

A stuck boring machine

In 2022, Clearway Construction Inc.'s tunnelling machine got tangled in tie-backs left underground from nearby condo work and was stuck underground for a year and a half while excavating new sewers near Old Mill to flood-proof homes in the area.

The $3-million machine required a complicated rescue, which the city confirmed Tuesday cost $25 million.

The city previously told the Star it gave a developer permission to leave those tie-backs underground.

But in a now-settled lawsuit with the city over money for the digger's rescue, Clearway said the city did not disclose that the tie-backs even existed.

In Toronto, there is no central database or one authority tracking the locations of the millions of tie-backs installed since the 1970s.

"In my mind, there is some onus on the design professionals involved in a given project" as well to do their due diligence and check for obstructions, said Mike Porco, an engineer and principal at Geostructural Engineering Services, who also verified the benefits of tiebacks outlined in Wednesday's report.

"But you don't know what you don't know."

Porco added that it can be disruptive to remove tie-backs after the work is done, because they are too deep underground and often fall outside of the property line, meaning they can be underneath roadways or other private properties.

"They're going to remain there forever, so they would then pose an obstruction to any future works," he said.

Tamer El-Diraby, a civil engineer and professor at the University of Toronto, said he would be surprised if Toronto adopts a blanket ban on tie-backs because that's "extreme." He said it's more likely that conditions might be placed on them.

"But in construction, no one can say which option is better than the other unless you see the special conditions of the site," El-Diraby said. "Everything is acceptable somewhere and not acceptable somewhere else."