



METAFLO[™]
technologies

Revolutionizing Waste Management for Toronto's Crosstown Subway

MetaFLO's solidification solution slashes transportation costs and meets stringent urban regulatory standards, supporting a sustainable transit infrastructure in one of Canada's busiest cities.

CASE STUDY



PROJECT
MF006 – CROSSTOWN SUBWAY TUNNELS

Toronto, Canada

MF006
MetaFLO Technologies

Challenge

The Crosstown Subway project, a major public transit expansion in Toronto, required extensive tunneling that produced large volumes of wet spoils, or excavated materials mixed with water. Managing this waste efficiently within a densely populated urban environment presented significant logistical and environmental challenges. Transporting the wet spoils off-site required night-time trucking to avoid adding congestion to already busy city roads, which increased project costs due to added hours and labor. Additionally, mud tracking along transport routes increased the need for frequent clean-up efforts, leading to further expenses and disruptions. To stay on schedule and meet Toronto's strict environmental standards, the project needed an efficient, sustainable solution for waste management that would reduce both costs and the project's environmental footprint.

Solution

MetaFLO provided an on-site solidification solution, applying a precise 0.25% reagent to the spoils, transforming the wet material into a stable, stackable solid. This process minimized the number of transport trips needed by consolidating the waste, allowing each truckload to carry more material. This reduction in transport trips lowered traffic disruptions and enhanced safety by limiting the frequency of truck movements in the city. MetaFLO's custom reagent packaging ensured accurate, consistent dosing, making logistics simpler and more cost-effective. The transformed spoils could then be transported more efficiently and, due to the stabilized state, could also be repurposed as clean fill in compliance with regulatory standards.





Outcome

- ✓ **REDUCED TRANSPORTATION COSTS**
Fewer truck trips were needed, as solidified spoils took up less space and were more easily transported, saving on fuel and transport expenses.
- ✓ **MINIMIZED MUD TRACKING**
The solidification process helped prevent mud spills, reducing the frequency and cost of road clean-up in high-traffic urban areas.
- ✓ **COMPLIANCE AND ENVIRONMENTAL BENEFIT**
The stabilized spoils met disposal standards, allowing for compliant disposal or repurposing as clean fill, aligning with Toronto's sustainability goals and supporting a greener approach to urban development.

