

# What Wheels Around, Holds the Ground

Tire Derived Aggregate for Leachate Drainage in Landfills

SWANA Northern Lights Chapter  
Waste in a World of Change  
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# Winnipeg/Brady Experience with TDA

- The Brady Road Resource Management Facility is home of the City's largest landfill. We receive over 300,000 tonnes of materials per year!
- Tire derived aggregate (TDA) was *piloted* as a drainage medium within a small area (70m x 100m) of waste disposal cells constructed in 2017 (Cell 31), 2019 (Cell 32), 2021 (Cell 33), and 2023 (Cell 34).
- TDA was implemented *full-scale* in our latest waste disposal cell in 2025 (Cell 35, 300m x 240m)
  - 20,000 tonnes of TDA was needed to blanket the floor of the cell.
  - 'Primary' leachate collection is provided through trenches in the floor that are lined with perforated pipe surrounded by clean round stone.

# TDA Standards

## ASTM D6270: Standard Practice for the Use of Scrap Tires in Civil Engineering Applications

- Type A
  - 75-100 mm (3"-4")
  - 720-800 kg/m<sup>3</sup> (45-50 pcf)
  - >1 cm/sec (24"/min)
- Type B
  - 150-305 mm (6"-12")
  - 560-800 kg/m<sup>3</sup> (35-50 pcf)
  - >1 cm/sec (24"/min)
- Class I
  - Thickness less than 1 metre
  - Maximum 50% (by weight) passing 38-mm sieve
- Class II
  - Thickness 1 to 3 metres
  - Maximum 25% (by weight) passing 38-mm sieve











# Let's talk about Tire Derived Aggregate for leachate drainage in landfills!



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