HYDROVAC TRUCK: WHAT IS IT, AND WHY IS IT USED IN THE USRC-E?

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GFL crew using a hydrovac truck to expose intricate utility infrastructure as found in the Union Station Rail Corridor - East (photo courtesy of GFL)

What's the Buzz in the corridor, and why is it happening?

As projects advance within the USRC, considerable amount of construction activities will involve the use of a vacuum (also know as hydrovac) truck. Hydrovac or hydro excavation is the term used to describe the use of high-pressure water to loosen soil and debris while the excavated material is suctioned into a tank, creating a loud humming or droning sound. Typically, conventional excavators are seen on major construction projects. However, due to intricate buried infrastructure, the complexity of our work, the limited working space and terrain inhabited, a hydrovac truck is the only option to complete this work. The following frequently asked questions will assist in better understanding the benefits of using this machine.

Hydrovac excavation utilizes high pressure water to break up dirt and material and suctions it away. Adjacent residents generally experience a loud humming noise when the vacuum truck is used. Work crews have been instructed to minimize the use of hydrovac equipment where possible and inform the community in advance.

Information as of: January 2024

METROLINX

Commonly asked questions:

WHAT IS A HYDROVAC?

A hydrovac is a piece of equipment that uses high-pressure water to cut and liquify the soil, while simultaneously using high volume vacuum to remove the soil from the excavation. Both fresh water and soil from the excavation are contained in a truck mounted unit.

WHAT ARE SOME OF THE MOST COMMON USES FOR HYDRO EXCAVATION TRUCKS?

Daylighting (practice of digging to expose and locate underground utilities), soil trenching (digging narrow trenches to install cables, pipelines and other in-ground utilities), piling hole excavation (digging holes of various diameters and depths to lay all types of pilings), debris removal and cold-weather digging.

WHY HYDROVAC AND NOT EXCAVATOR?

Buried beneath the USRC are very important utilities owned by telecommunications, gas, electricity service providers as well as CN and GO Transit signalling infrastructure. Conventional excavation in the rail corridor could potentially damage the utilities causing considerable interruption to communities across the GTHA and country, and risk considerable health hazards, injury, or death. Additionally, a hydrovac truck offers flexibility of movement, where it could be equipped with a "Hyrail" system, which allows it to mount on adjacent, protected track and position next to critical work. An excavator would require crossing panels be positioned across several tracks inhibiting train accessibility.

WHAT TO EXPECT

- Adjacent residents will experience loud humming noise while hydrovac trucks are in operation.
- Truck engines will be on during usage for power.
- Noise vibration monitoring will take place and mitigation measures will be considered when appropriate and safe to implement.
- Deployment will be within the USRCE and may occur during the day or at night, when the type of work conducted requires no train traffic for increased safety.
- Hydrovac deployment will involve the use of track lighting, which will be pointed away from residences.
- We apologize for any inconvenience during deployment and ask for your patience as we complete critical tasks supporting the GO Expansion mandate.

ANY QUESTIONS:

The Toronto East Community Engagement Team is here for you. Should you have any questions, please reach us as noted below. To stay informed, please subscribe to our weekly e-newsletter by scanning the QR code and selecting Toronto East from the menu.

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