Pile Driving

The tunnelled sections of the Windsor-Essex Parkway were designed in response to community input received during the Detroit River International Crossing study. Upon completion, these tunnels will provide community friendly features including new connections, green space and trails that will be enjoyed by your families and by generations to come.

Construction of the tunnelled sections includes bridges that will carry traffic over the below-grade Parkway. There are 26 tunnel and bridge structures that are included in the design. These structures require metal piles for support. Piles are made of heavy duty steel and are driven into the ground by a pile driver until they hit bedrock.

H Piles for the North Talbot Road Bridge structure

Approximately 5,600 steel piles are needed to support the tunnels and bridges. The main pile type to be used is the H-pile. The device used to install these is a diesel powered hammer or pile driver.

Pile driving is noisy and may cause noise beyond the project limits. We understand the concern residents adjacent to the construction area have regarding noise and vibration. Significant planning has gone into this project to ensure that construction operations have a minimized impact our corridor neighbours. As a result, pile driving for the Parkway will be conducted in accordance with municipal by-laws during daytime hours.

The overall construction schedule for the Parkway is aggressive. We want to work as quickly as possible to complete construction so that residents and travellers can start enjoying its transportation and community benefits. The use of pile drivers is vital to the construction of the tunnels and bridges in the Parkway.

A diesel hammer pile driver at Bridge 10

Additionally, to reduce the overall duration of pile driving activities, several pile drivers will operate simultaneously throughout the corridor.

How does a pile driver work?

The diesel hammer method of pile driving will be used for the Parkway structures. The hammer drop is one of the most common methods of pile driving. A hammer of cast iron weighing approximately 2,500 to 3,000 pounds is raised to a height of approximately 10 to 30 feet and then dropped on the pile.

What are the expected impacts of pile driving?

Residents will at times hear noise and may feel vibration depending on their proximity to the work taking place. Vibration is not heavy enough that it will impact pictures on walls or dishes in cabinets or cupboards. A pre-construction condition survey will be conducted in those areas that are believed to be within an area of potential impact. Parkway Infrastructure Constructors has contracted local company Chall-ENG to conduct these independent surveys.

A third party firm has been engaged to monitor vibration as needed and we will post monitoring reports monthly on www.weparkway.ca.

You can view video of a pile driver at work for the North Talbot Road Bridge on our YouTube page at: www.youtube.com/weparkway

Who can I contact if I have a question or concern?

We are working with communities during contruction of the Windsor-Essex Parkway. All neighbourhoods will be provided with advance notification of pile driving activities and information will be posted and updated on www.weparkway.ca. The Windsor Essex Mobility Group has a protocol in place to address inquiries and complaints received during the construction. The protocol can be viewed online at www.weparkway.ca.

If you have any concerns regarding construction of the Parkway, please contact or visit the Public Liaison Office at 1-877-937-5929, 2187 Huron Church Road Suite 340, or wep-plo@wemg.ca. Any public inquires related to pile driving will be treated as a priority and we will work to answer questions and resolve concerns as quickly as possible. Please be aware that the Public Liaison Office has extended hours every Monday. We will be available to the public until 8:00 p.m. on Mondays.

Please visit www.weparkway.ca to learn more about the Windsor-Essex Parkway. Updates will be posted on Twitter (www.twitter.com/WEParkway) and photos and videos will be posted on Flickr (www.flickr.com/weparkway) and YouTube (www.youtube.com/weparkway).