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Ms. Nancy Martins
Committee Administrator
Public Works and Infrastructure Committee
City Clerk's Office 10th Floor, West Tower, City Hall
100 Queen Street West
Toronto, Ontario, M5H 2N2
Via e-mail: pwic@toronto.ca

June 7, 2017

RE: PW22.5 Front Yard Parking Regulations

Dear Chair Robinson and Members of Committee;

Further to my conversation with Councillor Carmichael Greb, Permeable Interlocking Concrete Pavement (PICP) can be used as an effective pavement system for several types of applications including residential driveways.

PICP is a structural pavement and can be designed for applications support heavy vehicles. Typically, PICP can be designed to support loads of up to 1,000,000 ESAL.

PICP is designed to absorb rainfall through the joints in the pavement surface and into the pavement base. In doing so it will:

- 1) Reduce pollutants carried in the stormwater by filtering out suspended solids, heavy metals, gas and oil.
- 2) Reduce stormwater volume by encourageing infiltration into the native soil.
- Attenuate peak flows by detaining stormwater in the base and only releasing excess water to stormwater infrastructure over a period of 48 to 72 hours.

I have attached a sample cross section of a PICP system when used in a residential driveway application.

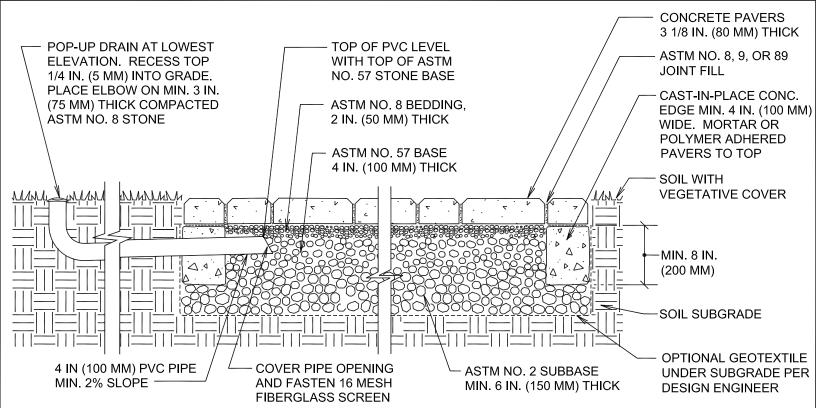
If members of committee or Staff are interested in obtaining further information about Permeable Interlocking Concrete Pavement, please contact me.

Respectfully,

Robert Bowers, P. Eng., LEED GA

Director of Engineering

Interlocking Concrete Pavement Institute



NOTES:

- 1. DESIGN, MATERIAL, AND CONSTRUCTION GUIDELINES TO FOLLOW ICPI GUIDE SPECIFICATIONS
- 2. DAYLIGHT DRAIN PIPE TO DRAINAGE SWALE. USE POP-UP DRAIN IN YARD (AS SHOWN) OR CONNECT TO STORM SEWER.
- 3. APPLY WATERPROOF MEMBRANE VERTICALLY AGAINST HOUSE FOUNDATION PRIOR TO PLACING SUBBASE AND BASE.
- 4. ALL SOIL SUBGRADES SHALL SLOPE TOWARD STREET.
- 5. SUBGRADE SOIL MAXIMUM CROSS SLOPE IS 0.5%. MAXIMUM LONGITUDINAL SLOPE IS 2% TOWARD STREET.
- 6. USE SOIL BERMS FOR LONGITUDINAL SOIL SUBGRADE SLOPES EXCEEDING 2% TOWARD STREET.
- 7. 5% MAXIMUM SURFACE SLOPE.
- 8. CAST-IN-PLACE CONCRETE CURBS CAN BE WITHOUT PAVERS ON TOP, IN SUCH CASES, CURBS SHOULD BE LEVEL WITH CONCRETE PAVER FIELD.
- 9. THICKER SUBBASE AND/OR ADDITIONAL DRAIN PIPES MAY BE REQUIRED IF DRIVEWAY RECEIVES RUNOFF FROM ADJACENT IMPERVIOUS SURFACES OR ROOFS.
- 10. NO. 2 STONE MAY BE SUBSTITUTED WITH NO. 3 OR NO. 4 STONE.

