

Pannahill Drive CON/SPAN Largest in Canada in 2007

Brampton, Ontario



Project:

Pannahill Drive CON/SPAN Brampton, Ontario

Owner:

City of Brampton

Developer:

Barrett Developments Limited

Precaster

Con Cast Pipe Guelph, Ontario

Product:

Over 40 units of precast arch, each with a span of 10.98 metres and rise of 3.96 metres.

Pre-welded rebar cages for CON/SPAN arches fabricated in Welland facility

StelCrete is working with Con Cast Pipe in Guelph, Ontario to fabricate pre-welded rebar cages for precast CON/SPAN arches. The precast units for Pannahill Drive in Brampton were used for a bridge to accommodate traffic from a development by Barrett Developments Limited located near the north-west corner of the Cottrelle Boulevard extension and The Gore Road.

The Pannahill Drive project demonstrates an aesthetic and cost effective option to large clear span bridges. The structure was a triple cell design, incorporating over 40 units of precast arch, each with a span of 10.98m

StelCrete Industries Limited

and rise of 3.96m.

Stelcrete provided manufactured rebar cages for the arches, in addition to fabricated epoxy rebar for the headwalls and wing walls. A jig was specially designed for the arches.

The 10.98m unit was the largest of CON/SPAN units produced by CON/SPAN Canada licensees in 2007. To compliment the arch shape, a form liner was used to create stone block textured headwalls and wing walls. These components complete the CON/SPAN system.

Design of crossings using multiple cells are similar in their function for bridging waterway channels, as they are for providing additional overflow capacities for future storm flows.

The Pannahill Drive CON/SPAN units are large enough to accommodate human and wildlife movement along the banks of the watercourse spanned by the centre arch.

The entire precast structure is designed to stretch 23m wide, and to span 35m long. If wing walls are included in its length, the structure is 65m long.

Following the preparation of poured-in-place footings, the precast components were installed by crane over a period of five days.



10.98m units largest produced in Canada in 2007

Production of the units by Con Cast Pipe was one pour per day.



Mobile crane places cage into mold



Placement of rebar cage in mold with a span of 10.98m and vertical rise of 3.96m.

