

## Culvert repair: slip-lining versus relining with centrifugally cast CentriPipe

June 7, 2013  
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In February, 2013, the Saskatchewan Ministry of Highways started a culvert repair project on Highway 9 to test three competing methods of culvert rehabilitation. The methods that Saskatchewan wanted to compare were:

1. replacing old culvert by boring new parallel culvert
2. repairing culvert by slip-lining a new liner into the old pipe
3. relining old culvert with centrifugally cast concrete CentriPipe

One of the main advantages of relining with CentriPipe is that the culvert's capacity is preserved – the concrete liner does not significantly reduce the culvert's diameter or capacity.

### CULVERT REHABILITATION:

I visited the Highway 9 culvert site in Saskatchewan last week to see how the sliplining solution compared to the CentriPipe culvert we did in February. Following are several dramatic photos showing the difference between sliplining and CentriPipe.

Compared to the CentriPipe centrifugally cast concrete culvert, the slip-lined culvert is 35% smaller (30" compared to 46"). This translates in a 58%



48" CMP culvert relined with centrifugally cast CentriPipe concrete liner. No significant reduction in flow capacity.

difference in flow capacity between the two relined culverts (3.6 m<sup>3</sup>/s with CentriPipe down to 1.5 m<sup>3</sup>/s with slip-lining). If keeping a culvert's high flow capacity is important to you, please consider CentriPipe centrifugally cast relining.

Martech represents APM CentriPipe in Canada. If you have deteriorating culverts in your area, ask us for help in getting your culverts repaired with CentriPipe.



About half a kilometer up the road, this 48" culvert was rehabilitated with a slip-lining solution.



This culvert's ID was reduced from 48" to 30". The CentriPipe culvert's new ID is 46".