



**Project Title:** Commercial Parking Lot Development

**Client:** Sobeys Inc.

## **Project Description:**

GEMTEC has been involved in the design and/or construction of a number of parking lots for commercial developments over the past 10 years. These have included those for Sobeys stores throughout New Brunswick including those at Fredericton, Oromocto, Campbellton and Sussex. We have also designed and/or supervised the construction of parking lots for major hotels, schools and large box stores.

Each and every parking lot design presents different challenges in terms of; run-off control; soil conditions; grade challenges, etc. In recent years each parking lot design have required hydraulic calculations and design elements to limit discharge to meet the particular municipalities requirements (i.e. 1:5; 1:10 year flows). One common theme with all of GEMTEC's designs is to maintain grades between 2 to 3 percent. We believe that grades of less than 2% will lead to premature failure as a result of ponding water. Grades greater than 3% present safety issues. We have also found it important to undertake a detailed design of the pavement structure as a function not only of loading (i.e. vehicular traffic) but also of the underlying soil conditions. Our geotechnical and materials expertise have proved to be an asset with these considerations.

In addition to design and tendering, GEMTEC has also provided construction inspection experience with respect to these parking lots. Again, our geotechnical and materials expertise has proven very useful in dealing with unforeseen soil conditions during construction.