

# History of the Dean Lake Bridge

- ❖ **Observation: The history of the Dean Lake Bridge is a Love-Hate relationship. We love it when it is opened and we hate it when it is closed!!!!!!**
- The Provincial Department of Public Works let out the tender for the construction of the Bridge took place in 1907 with the drawings submitted on Sept 24, 1907. The bridge was constructed by the Algoma Steel Bridge Company Ltd. of which no record has been found of the company.
- On Nov. 27<sup>th</sup>, 1908, the grand opening of the bridge took place, having been constructed in only one year!
- The bridge was totally funded by the Province at a total of \$26,000.00 and the success of obtaining the funding was attributed to William Ross Smyth the MPP who represented Algoma East in the Legislative Assembly of Ontario from 1902 to 1908 as a Conservative member. He resigned from Provincial Politics to become the Federal representative from 1908 to 1917. He was a renown lumber merchant and is known for the Victorian mansion in Rydal Bank.
- At the grand opening ceremonies, Mr. Smyth MP, Mr Albert Grigg ( Conservative nominee to replace Smyth) and the Premier of Ontario, Sir James Pliny Whitney were in attendance. The gentleman with the Bowler hat in the centre of the photo of the opening has been identified as the Premier by the historian Edith Cameron and a photo on file of the Premier who was known for his love of Bowlers. Ironically it was noted that the opening ceremonies would not be a political event!!!
- **Why a bridge here anyways?**
  1. Previous to construction of the bridge, you had to use a scow to cross the river.
  2. Although it would be tempting to think that the government of the day would spend all this money on 50-70 residents south of the Mississagi River, there was another reason to pump this sort of money into the area.
    - The Premier was known for his drive to develop northern Ontario.
    - In 1899 Eddy Brothers moved a sawmill from Bay City, Michigan and established it in Blind River. Thus started a major boom in the

housing and hotel construction in Blind River. Wood for the Mill initially came from the Matinenda area accessed from the Blind River but as other townships to the west were opened for logging by the government, there was a need to find a better access route. Hence the Dean Lake railway station was decided to be the best route. Dean Lake no doubt became well known to the government of the day as Eddy Brothers and other logging companies lobbied for a place to unload at the railway all the supplies needed to access and run the numerous logging camps up the Little White and Mississagi Rivers. All that was needed was a bridge across the River and everything would be fine. And so the bridge was built in a little over one year and still stands the last of its type and is a symbol of the government of the day helping to develop this local area.

- After the bridge was built, the Hope Lumber Company established its headquarters at Dean Lake in 1914 to 1924 and was the primary user of the bridge. These were the best of times in Dean Lake. Residents from Iron Bridge and Patton townships used the bridge to access the railway station. There was a boarding house, store, post office, school and a church. Local farms produced hay horses and potatoes for the camps and it was all hauled over the bridge to the logging camps along with hundreds of horses, men and equipment.

#### **Bridge Statistics from the 1908 drawings:**

1. There are 3 spans of 122 feet each for a total of 366 feet
2. Under each of the cement cribbing there are wooden pilings driven into the river bottom
3. There was originally another smaller bridge joining the island to the north side of the river at a length of 76 feet. This was replaced by a culvert in the 1950's.
4. The extreme high water mark was 4 feet below the deck and normal high water was noted as 6 feet below the deck. [This was before the dam at Red Rock with controlled flows and a local resident Ron Chevis recalls that during one log drive, men were placed on the bridge to push the logs under the bridge to keep them from jamming there.

5. The approaches that you see now were the result of thousands of yards of fill placed there to ensure the approaches were above the flood plan of the river.

- Throughout the next 78 years the deck timbers have been replaced and the abutments re-cemented in places but no formal record of the work is on file.
- In 1986 it became apparent that the steel structure was suffering from corrosion and was posing a safety risk.
  
- Kresin Engineering was hired to inspect the bridge in 1987 and their inspection report revealed the following:
  - ◆ The bridge was in poor condition
  - ◆ The timber deck had deteriorated badly
  - ◆ The steel members and stringers adjacent to the abutments were badly corroded
  - ◆ The bridge bearings were rusted frozen
  - ◆ The cement piers had extensive cracking and spalling
  - ◆ The existing 7 tonne limit had to be dropped to 5 tonnes
  
- Work on the rehabilitation of the bridge started on Nov 17, 1988 by Cantec Construction Ltd. of Elliott Lake and it was opened Jan 17, 1989 after 2 months, 3 days ahead of schedule. Total cost was \$312,000.00 [ Province providing 90%?] for new bearings, replacement steel stringers and cross members, a new pressure treated deck and extensive work on the southern cement pier. Load limits were increased to 16 tonnes upon completion of the work. MTO cautioned that the rehabilitated bridge was only good for until 1998 in the short term to 2008 in the long term.
  
- In 2004 it became apparent that the new pressure treated deck was experiencing failure as the metal clips and nails were deteriorating at an excessive rate. The bridge was closed. Emergency repairs occurred from Oct 2 to Oct 18<sup>th</sup> 2004, at which time 2 portions of the deck were replaced and several steel stringers were found to be excessively corroded. It was determined that a reaction between the pressure treated wood and metal components was being experienced causing metal failure where the

two components were in contact with each other. Total repair cost was \$51,444.90 which was funded totally by the Municipality.

- Alternative deck construction techniques were now reviewed in order to avoid the problems of the past and a desire for a better long term solution,. The bridge was once again closed from Sept 17, 2007 to Feb 13, 2008. The entire pressure treated deck was removed, the steel structure was painted and a new deck of 6 fabricated fibre glass panels was installed. This design as you see it now should extend the life of the Dean Lake Bridge for another 25 years. The total cost was \$616,823.00 with 1/3 or the cost picked up by the Federal Government, the Province picking up 1/3 and the Municipality 1/3.

In closing ...the Dean Lake Bridge is a testament to decisions made the provincial government 100 years ago to construct a steel bridge across the Mississagi River. That decision has benefited all those that have used the Bridge ever since. As you have seen, the costs to keep this historic structure maintained and in operational order has been a challenge. We appreciate the role that the Provincial and Federal Government has played in contributing to ensuring that the Dean Lake Bridge is around for future generations to use and enjoy.

**Gord Campbell**

**Sept 27, 2008**