

Information Guide

Full Highway Loading Bridges for Low Volume Roads Stringer Type

Designed to handle a vehicle wheel loading
of a CL-625 Ontario truck as per the CHBDC CAN / CSA-S6-06





Your complete information guide to...

www.lessardwelding.com

Full Highway Loading Bridges for Low Volume Roads – Stringer Type

1. What are these bridges designed and certified for?

These bridges are designed and certified for a vehicle wheel loading of a **CL-625 Ontario truck** as per the **Canadian Highway Bridge Design Code CAN / CSA-S6-06**. It is completed by two professional bridge engineers who verify that the bridges meet the Canadian Highway Bridge Design Code standards as well as the standards of the Ministry of Natural Resources of Ontario. Both engineer's stamps appear on the blue prints. These portable bridges are designed for use on low volume crown land access roads and are certified to meet the standard identified in the latest version of the Ministry of Natural Resources "Crown Land Bridge Management Guidelines", dated February 2008. **The bridge has been designed to support the design load stated in CAN/CSA-S6-06, using the CL-625 Ontario Live Loading.**

LESSARD WELDING
www.lessardwelding.com

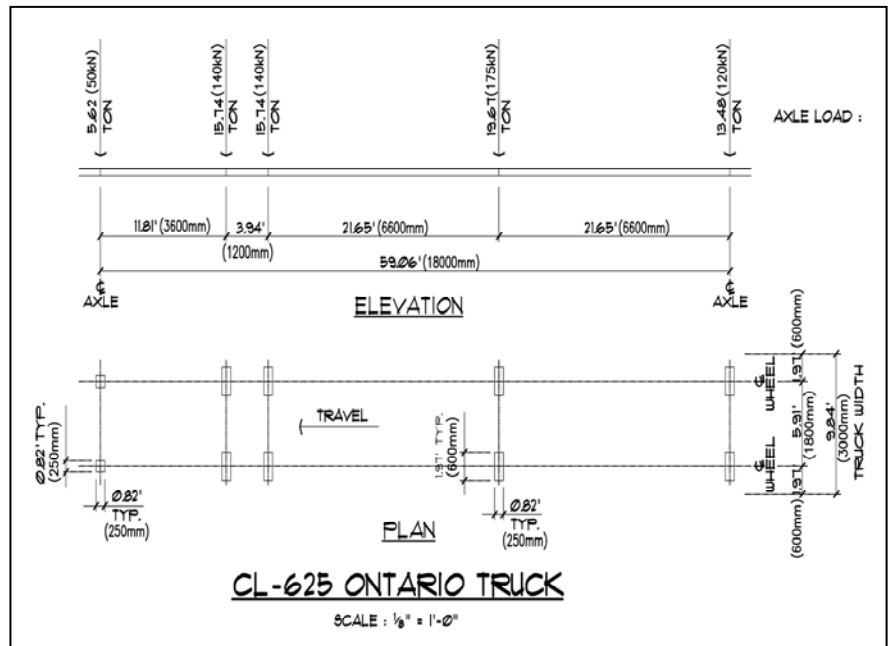
50' (15.24m) SPAN - STEEL PORTABLE BRIDGE

	Design : J.M.S.
	Drawn : AH
	Checked : AA
	Date : AUG. 18, 2011
Deg. No. LW-8350 Job No. 211089	

SPRIET ASSOCIATES LIMITED
LONDON CONSULTING ENGINEERS
100 YORK STREET - LONDON ONT. N6A 4B8 - 416-863-1814

2. What types of vehicles can cross these bridges?

Our Full Highway Loading Bridges are technically designed to handle a vehicle wheel loading of a **CL-625 Ontario truck** as per the **Canadian Highway Bridge Design Code CAN / CSA-S6-06**. In other words, any vehicle that is legal on Canadian roads and does not require a special permit can cross these bridges.



3. How high are these bridges?



Our stringer type bridge is considered to have a high profile.

Bridge	40 ft.	48 ft.	56 ft.	64 ft.	72 ft.	80 ft.
Height (approx.)	35"	38"	41"	44"	47"	51"



4. What is the concept of these bridges?



Our stringer type bridge consists of three stringer beams installed one by one. The inside of the girders are reinforced with cross members that need to be bolted into place on site. This design feature is important as it prevents the girders from deflecting outwards. Without these cross members, the integrity of the bridge could be seriously jeopardized. If absent, the structure could eventually be

weakened and render the bridge to be unsafe. Costly repairs or even complete bridge replacement may be in order. Steel deck panels are then installed over the structure. This type of bridge is 13' 4" wide and is available in 40 ft., 48 ft., 56 ft., 64 ft., 72 ft. and 80 ft. lengths. Each panel measures 13' 4" wide x 8 ft. long and is completely covered by a 3/8" steel checker plate.



Essentially, the steel deck panels consist of two rectangular steel tubing pre-welded underneath each side of the panels enabling the panels to lock into place in between the outer girders. Each

panel is basically slid into place one by one. Each panel is then bolted to the next panel using the pre-welded clips. You are able to drive over the installed panel(s) to install the next panel(s).



5. Can you tell me more about the deck panels?



Our 3/8" checker plate is supported by cross members every 12" across the length of each 8 ft. panel. The reinforcing PREVENTS the decking from warping, deforming and deflecting. Without these cross members, the decking may warp causing it to rust and corrode much more quickly, and could eventually weaken the surface and render the bridge unsafe. Costly repairs or complete deck replacement may be in order.



Quality welding ensures that our decking is completely flush and smooth from one panel to the next, offering a safer surface to work and walk on. Grader and plow operators will certainly appreciate this design as winter grading operations will run smoothly. There are no openings for debris to enter the water underneath.



Your complete information guide to...

www.lessardwelding.com

Full Highway Loading Bridges for Low Volume Roads – Stringer Type



All panels are equipped with a pre-welded 12" channel guard on each side acting as a curb. The 12" gravel retainer meets the MNR's guide rail standard.

6. *Is the surface slippery?*

An anti-slip product is applied to the surface of the decks to help prevent slips and falls from happening while working or walking across our bridges.

7. *Can you tell me more about the guard rail pockets?*



Our guard rail pockets consist of 8" x 8" x 12" hollow structural steel tubing pre-welded (eliminating on-site labor) and spaced at every 6' 3" (as required) to the outer sides of the deck panels. This 8" size pocket responds to the MNR's requirements and allows for heavy duty timber posts to be inserted offering a much stronger guard rail.

8. *Are there any lifting points on the components to ease handling?*

There are numerous lifting points all the way around the perimeter of each bridge component such as the beams and deck panels. These are extremely handy for maneuvering the bridge components into place.

9. *Is there an identification system for each bridge?*



Each bridge is assigned an individual serial number for easy tracking and record keeping. Accurate records are a requirement of the OMNR Crown Land Bridge Management Guidelines – 2008.

Lessard Welding maintains a detailed bridge information database of all the bridges sold therefore we can offer existing bridge customers up to date information about their purchased bridges.



Your complete information guide to...

www.lessardwelding.com

Full Highway Loading Bridges for Low Volume Roads – Stringer Type



Lessard Welding issues a letter of confirmation for each bridge for proper record keeping as required by the OMNR Crown Land Bridge Management Guidelines – 2008. Our letter specifies information in regards to the bridge as well as drawing information.

Along with the letter of confirmation, we also provide our customers with a general arrangements drawing of the bridge.

10. What are Lessard Welding's certifications in terms of quality?



ISO 9001
QMI-SAI Global
001723

Lessard Welding is certified to CSA Standard W47.1 in Division 2 by the Canadian Welding Bureau and operates a Quality Management System which complies with the requirements of the ISO 9001:2008 standards.

For more information

Natalie Lessard

4590 Regional Road 15

Chelmsford, ON

P0M 1L0

Tel: 705-855-3480

Fax: 705-855-5586

Toll Free: 888-234-3687

E-mail: natalie@lessardwelding.com

Website: www.lessardwelding.com