

10/24/2013

ND Public Service Commission
Testing & Safety Division
600 East Boulevard Avenue
Bismarck, ND 58505

Request for Variance Permit:

CHS, Inc. d.b.a. CHS – Milton Group (CHS) is requesting a variance permit for the installation of two new truck scales that will be located at the following site:

CHS Calvin Grain Terminal
401 Railroad Street
Calvin, ND 58323

Both scales are manufactured by Rice Lake Weighing Systems (RLWS) out of Rice Lake, WI. The scales being installed are above ground RLWS SURVIVOR® OTR Model EZ11712-SC-100-OTR truck scales with guide rails. The deck size is 117' x 12'. The concentrated load capacity (CLC) is 100,000lbs. All trucks weighed on the scales will fall within their CLC and not pose a safety hazard. The truck scale serial numbers at the Calvin Site are 56E3 & 56DP.

CHS is requesting a variance permit to allow the foundation of each scale to be a floating slab design, instead of piers below frost. The reason CHS is requesting a floating slab variance is because we feel it is a more stable foundation design, especially in a high water table situation. Also, a floating slab foundation is less likely to interfere with any underground obstructions (ie.: power lines, gas lines, or fiber optic cables). The CHS floating slab design specs exceed the manufacturer's minimum requirements for slab on grade design. (Please see foundation PDF reference-only drawing.) The floating slab foundation shall have the following specifications:

- The foundation will be a 12" thick concrete floating slab with the minimum soil bearing of 1500 pounds per square foot. A copy of the earthwork observation is attached.
- Installation will incorporate a minimum 24" base of uniform, compacted, permeable aggregate. A monolithic concrete foundation slab will be poured on top of the base aggregate and used to support the scale weighing elements.
- The top surface of the concrete foundation slab will be installed above surrounding grade level to allow water to flow away from the foundation and away from the aggregate base that supports the foundation.
- The concrete foundation slab will include the following -Two mats of rebar are required at load bearing sections. Rebar in the top face perpendicular to traffic shall be at least #5 at 4" on center (O.C.), with 5'-0", #4 bars in the direction of traffic at 12" O.C. Rebar in the bottom face and in the direction of traffic shall be spaced at 6" O.C. beneath the cells within the development length, and spaced at 12" O.C. across the mid-span of the slab. Between load bearing sections, a single mat of #4 rebar at 12" O.C. shall be incorporated in both directions.
- Scale(s) will have a minimum of 12 inches clearance, between "I" beam and the slab.

- The end piers of the foundation will have end walls to prevent fill material from interfering with the scale(s) operations.
- Installation will include 39' concrete approaches on each end of the scale(s). The approaches will be in a straight line away from the scale(s), the same width as the scale(s). Past the 12' flat approach required by the state, an additional 27' sloped approaches the same width as the flat approaches will be added. The slope of these approaches shall not exceed 1/3" per foot. The sloped approaches shall have thickened footing on the sides down to the surrounding road elevation.

Upon receiving approval for the temporary variance permit, CHS will be responsible for having the scale(s) tested quarterly by a registered service company for a period of one year. After one year, CHS desires the ND Public Service Commission review the scale(s) performance and grant a permanent variance permit.

Please let me know if you have any questions regarding this request, or if you require any further information. CHS would appreciate a response to this request as soon as possible as we are planning to begin the truck scale phase of construction in the near future. Thank you in advance for your consideration.

Respectfully,



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