

Canadian Government Grain Elevator in Saskatoon

Statement of Significance

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Description of Historic Place

The Government Grain Elevator is a complex of concrete and brick structures occupying a 6.3 hectare lot at 3402 11th Street West in the city of Saskatoon. The site features a 40 metre high grain elevator workhouse and an annex consisting of 84 reinforced concrete bins constructed in 1914, and an additional 56 reinforced concrete bins added in 1932. The train shed and other minor structures were built in 1914.

Heritage Value

The heritage value of the Government Grain Elevator lies in its role in reshaping the grain handling industry. Farmers accused grain handling companies of unfair practices at terminals aimed at suppressing grain prices. They believed the solution lies in public expropriation of the terminals which should then be run as a public utility. A commission appointed in 1912 to examine these accusations proposed a compromise the government adopted. Under the authority of the Canada Grain Act of 1912, the Board of Grain Commissioners built 5 elevators at Port Arthur, Saskatoon, Moose Jaw, Calgary and Vancouver. This new system of publicly owned terminals would preserve the existing grain companies which would henceforth have to compete with publicly owned terminal elevators. Whereas, inspection, weighing, cleaning, and drying of grains formerly took place at port terminals, the construction of the inland terminals brought these services closer to farmers. Plans and photos of the structure appeared in many commercial and government publications. The buildings served the Government Grain Elevator from 1914 until 1979 when it was sold to the Northern Sales Company Ltd and later to the Saskatchewan Wheat Pool in 1990. Since that time, the structure has functioned as a grain storage, cleaning and shipping facility. The complex remains an imposing landmark which has symbolized the modernity and success of agriculture and the local community since 1910.

The heritage value of the Government Grain Elevator lies in its distinctive design which is representative of a new phase in large elevator design- the separation of the main workhouse structure from the storage annex. This new innovative design first appeared in the early 1900s and had become an accepted method for grain terminal construction by 1914. This design replaced pre-1900 first-generation large elevator design in which a single structure contained the storage bins with the workhouse built on top.

The heritage value of the Government Grain Elevator also lies in its engineering and the use of sophisticated construction techniques. The construction of the Government Grain Elevator helped to introduce new industrial building techniques to Western Canada. The Saskatoon elevator is one of three Government Grain Elevators on the prairies that were built by the Barnett-McQueen Co. Ltd. The company pioneered the use of slip form reinforced concrete construction in Canada with the construction of the CPR King's Elevator in Port William in 1903. The use of slip form construction in Saskatchewan at such an early date illustrates the strong competition between elevator engineering companies in their efforts to improve construction and grain handling technology. The Government Grain Elevator is the third slip-form grain handling or processing facility built on the prairies with the Quaker Oats Mill in Saskatoon being the first in 1910, and the second being the Robin Hood Flour Mill in Moose Jaw built in 1912.

The elevator is of heritage significance because it is largely representative of the grain handling technology that was considered state-of-the-art in the early 1900s. Despite ongoing replacement of machinery and modernization of equipment and safety standards, the grain elevator structure and its annexes operate in very much the same way as they did in the early 1900s. The fundamental operation and equipment within the elevator is an excellent example of the grain handling technology of the early 1900s. The construction of the inland grain terminal elevator in Saskatoon was a major engineering achievement, far larger than any other grain storage facility, and served to solidify the city's position as a major grain handling and milling centre.

Character Defining Elements

The heritage value of the Government Grain Elevator resides in the following character-defining elements:

- Those elements reflecting architectural design, engineering and technology that were considered state-of-the-art in 1914 such as: the separation of the main workhouse structure from the annex; the construction of the elevator workhouse using a reinforced concrete frame and using brick paneling to infill the walls in order to hasten the speed of construction; the construction of the annex storage silos using slip-formed reinforced concrete.
- Those elements reflecting the grain elevator's sturdy construction, practical design and large storage capacity. Such elements include: the elevator main house constructed in 1914 containing elevating equipment, and a storage capacity of 500,000 bushel (14,000 tonnes) held in 50 circular bins, 36 interstice bins, and 16 outerstic bins; the annex also constructed in 1914 with a storage capacity of 3,000,000 bushels (81,645 tonnes) consisting of 84 circular bins and 66 interstice bins; the 1932 addition to the annex with a storage capacity of 2,000,000 bushels (54,430 tonnes).
- Those elements which reflect the property's function as a grain elevator and use of grain handling, storage and processing technology dating to the early 1900s such as: the three receiving and three shipping legs and associated motors and equipment which, although are not original, are housed within the same steel leg case in their original location and function in a similar fashion to the original equipment; the large bins in the main house which provide storage and transfer of grain to cleaners, scales, the annexes and railway trains as well as associated chutes, levers, pulleys and other original equipment dating to 1914; the original equipment for weighing grain on the scale floor including four original hopper (garner) bins, the original scale bins that weigh grain for transfer.
- Other equipment of significance to grain handling technology includes: the conveyor belt equipment that carry grain in tunnels under the annexes from the annex silos to the elevating leg; the conveyor belt equipment that carries grain from the elevator's bin-top floor through four enclosed conveyor bridges into the conveyor gallery on the top of the annex; in the conveyor gallery on top of the annex, the original "trips" or mechanical devices circa 1914 that are powered by the conveyor belt and travel along its length and serve to divert grain from the conveyor into any of the bins which lie to either side of the two conveyors running across the top of the annexes. Although the belts on the conveyor have been replaced, the framework supporting the conveyors as well the associated chutes and valves, pulleys, bearings and rollers, are original equipment dating from 1914. Original rollers can be identified by their Babbitt grease-sockets.

- Those elements that demonstrate the property's function as a grain elevator, including machinery for weighing, cleaning and elevating grain, various ladders, the stairs and railings, and fire proof strong metal clad doors inside the building and on the exterior.
- Those elements which reflect the era of industrial technology from the early 20th century including: the friction pulley and flywheel equipment in the elevator basement dates to 1914 used daily for moving rail cars in the shipping alley; the strong cast iron hatches allowing access to the bins.
- The minimum exterior fenestration on the elevator and annex featuring: several dozen windows with plain sashes in the five floors rising above the elevator main house storage bins; several small plain sash windows on the lower storage bin section of the main house; several dozen large plain sash windows in the annex conveyor gallery.
- The mill and elevators stand in their original location on a railway siding on the outskirts of Saskatoon. The location of this massive facility was encouraged by the city's flour milling interests at the time of its construction and helped to strengthen Saskatoon's role as a distribution centre.

SOURCES:

Vervoort, Patricia.

Industrial Building in the West: The Dominion Government Elevators at Saskatoon, Moose Jaw and Calgary. Sept. 1991 (16:3), p. 60-71. SSAC-SEAC journal.