

Alberta Foundry & Machine Shop



<i>Date of Construction</i>	1911-1914 / 1916
<i>Address</i>	801 Smelter (Gerald) Avenue SE
<i>Original Owner</i>	Alberta Foundry & Machine Co.
<i>Architects</i>	John E. Davies (1912) William D. Lawrence (1916)
<i>Contractors</i>	Arthur Dickinson (1911) Morton Fulton (1916)
<i>Neighbourhood</i>	South Flats
<i>Legal</i>	7487HH,X
<i>Historic Legal</i>	2630AM;H and 1992B;2;8-10

Description of Historic Place

The Alberta Foundry and Machine Shop is a substantial one and two-storey red brick building situated in a mixed residential and industrial neighbourhood southeast of Medicine Hat's commercial downtown. The building is positioned mid-block on Smelter Avenue SE between South Railway Street and Factory Street SE with an extensive industrial yard to the rear and northeast sides of the building. The central two-storey section is flanked on both sides by one-storey bays with large, regularly spaced fenestration running the length of both bays. A central parapet, corbelled cornice, brick piers creating panelled bays, and multiple painted-signs accent the red brick exterior of the building's front façade.

Heritage Value of Historic Place

The Alberta Foundry and Machine Shop, built in 1911, is valued as an impressive physical example of Medicine Hat's rich manufacturing industry established during the city's Edwardian economic boom, and for its over one-century-

long continuous operation. Medicine Hat's manufacturing industry developed in the pre-First World War period due to its positioning along the CPR and abundant supply of natural gas. These factors resulted in low production costs and the easy movement of raw materials and goods to and from Medicine Hat. Situated in the South Flats neighbourhood south of the main railway line, the Alberta Foundry and Machine Shop was established in 1911 by J.E. Davies and D.W. Davies of Three Rivers, Quebec. The factory's first incarnation was a one-storey wooden-frame building with central clearstory and clad in metal siding. Agreement between Davies and the city for the land, natural gas supply, tax exemptions, and diversion of Seven Persons Creek were arranged prior to the construction of the factory. When the factory opened in July 1911, the primary stakeholders were J.E. Davies, H.C. Yuill, and Herbert MacDougall. Rapid growth of the manufacturing industry in Medicine Hat resulted in the construction of the Machine Shop northeast of the foundry the following year. Then in 1913, the Foundry and Machine Shop were connected by a two-storey addition,

which served as the company's offices. The factory initially formed and manufactured engines, boilers, milling and mining supplies, waterworks equipment, building castings, farm implements such as threshers and plows, and supplied structural steel. Ammunition contracts awarded during the First World War resulted in further expansion of the Alberta Foundry and Machine Shop in 1916. The building evident on the site today, a one and two-storey steel structure with brick exterior, was designed by W. D. Lawrence, and built for \$20,000. To minimize interference with the operation of the factory, the new building was constructed over the existing wooden-frame and metal clad building, and then, once the new brick building was completed, the original factory was dismantled. Business declined following the First World War and the factory was leased to the Canadian Farm Implement Co. for the production of the Canadian Tractor (1920-1921). After a prolonged period of economic downturn, the Alberta Foundry and Machine Shop again benefited from government contracts during the Second World War. In 1955, the Alberta Foundry and Machine Shop was purchased by T. McAvity and Sons (Western) Ltd., which manufactured hydrants and valves. Five years later the company was purchased by Crane Canada Ltd. and renamed the McAvity Division of Crane. The company continued to manufacture hydrants as well as municipal water and sewer fixtures. In the early 1980s, the factory underwent a substantial equipment retrofit and a decade later McAvity Division was purchased by Clow Canada, who continue to operate the foundry to the present day.

The Alberta Foundry and Machine Shop is further valued for its significant association with Canada's war effort during the First and Second World Wars through the manufacturing of ammunition. Following the declaration of war on August 4, 1914, the British Empire called on its Dominion to aid in the war effort through the enlistment of men, purchasing of Victory Loans, implementation of consumption

restrictions, and the reconfiguration of factories for munitions production; Medicine Hat contributed significantly on all fronts. In April 1915, the Alberta Foundry and Machine Shop was retrofitted following the award of a contract by the British Ordnance Department to manufacture 18-pounder shell casings. The substantial size of the contract led J. E. Davies to subcontract portions of the work to other local companies including the Medicine Hat Pump and Brass Company and the International Supply Company. Between the two world wars the company's business slowed and the factory's labour force was substantially reduced. With the outbreak of the Second World War in 1939, the Alberta Foundry and Machine Shop was again engaged to manufacture ammunition. It was awarded a contract for the production of 150,000, 3.7" anti-craft shell casings by the Department of Munitions and Supply, and later an order for 3.7" shrapnel shell casings. Between 1940 and 1944, the factory was completely converted to munitions production. It employed over 150 people and operated 20 hours a day. By 1945, the Alberta Foundry and Machine Shop had manufactured over half a million shells, significantly contributing the Allies' winning of the Second World War.

The Alberta Foundry and Machine Shop is valued as a handsome and rare example of an Edwardian-style industrial building, locally designed and constructed using locally manufactured materials. The extant factory, constructed in 1916, exhibits classic Edwardian architectural features, such as symmetry of plan, single-hung windows, brick detailing, corbelled cornice, central parapet, and painted company signage on the front façade. The functional nature of the design is evident in the Alberta Foundry and Machine Shop's clean lines, use of durable materials, extensive glazing in regular arrangement, structural steel frame, and open interior space. The quality of craftsmanship and materials used is evident in the building's condition and enduring use as a manufacturing base in Medicine Hat.

Character-Defining Elements - Alberta Foundry & Machine Shop (801 Smelter Avenue SE)



- Location on the south side of Smelter Avenue SE between South Railway Street and Factory Street SE in Medicine Hat's South Flats neighbourhood; setback from the street



- Landscaped with grassed yard with mature trees at front façade; concrete capped low red brick wall with square column terminus at southwest corner of building



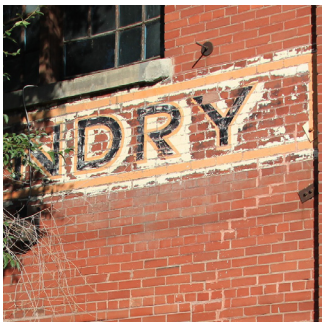
- Form, scale, and massing as expressed by its: irregular plan; two-storey central section with one-storey bays running the length of both sides of the building; and two-storey wing at the rear of both bays



- Masonry construction including: concrete foundation; structural steel frame; load-bearing exterior of stretcher pattern pressed red brick with red and grey mortar on the front façade; load-bearing pressed red brick with cream mortar on the side and rear façades; brick chimney; parged sills throughout

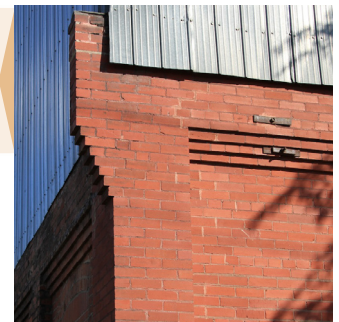


- Fenestration such as: single assembly 8-over-8 single-hung wooden-sash windows with parged lintels; single assembly segmental arch 6-over-6 wooden-sash windows; double assembly multi-light fixed wooden-sash windows; single assembly 6-over-3 single-hung wooden-sash windows; single assembly 3-over-3 single-hung wooden-sash windows; single assembly 3-over-1 single-hung wooden-sash windows; single assembly 8-over-6 single-hung wooden-sash windows; boarded over single assembly segmental arch window openings with original wooden-sashes in situ; double assembly window opening with parged lintel; single assembly window opening with parged lintel; multiple loading bay door openings



- Edwardian-style details such as: minimally embellished exterior; balanced plan, corbelled cornice, central parapet, regular piers creating panelled bays; corbelled, flared parapet at corners; extensive fenestration in regular arrangement on front and sides of building

- Additional elements including: corrugated metal siding and painted company branding



Statement of Integrity - Alberta Foundry & Machine Shop (801 Smelter Avenue SE)

Applicable Significance Criteria

This site is significant because...

Theme / Activity / Cultural Practice / Event Yes No

-The Alberta Foundry and Machine Shop is valued as an impressive physical example of Medicine Hat's rich manufacturing industry established during the city's Edwardian economic boom and for its over one-century long continuous operation (**Theme Value – Made in Medicine Hat**).

-The Alberta Foundry and Machine Shop is further valued for its significant association with the Canada's war efforts during the First and Second World Wars through the manufacturing of ammunition (**Theme Value – Centre for Defence, Science, and Technology**).

Institution / Person Yes No

Design / Style / Construction Yes No

-The Alberta Foundry and Machine Shop is valued as a handsome and rare example of an Edwardian-style industrial building, locally designed and constructed using locally manufacture materials (**Theme Value – Built in Medicine Hat**).

Information Potential Yes No

Landmark / Symbolic Value Yes No

Period of Significance

1906 – 1913 Pre-First World War Boom, Age of Optimism
1914 – 1918 First World War

Chronology of Alterations

1912 - Machine Shop built (wood-frame & metal cladding)
1913 - Two-storey front addition connecting foundry and shop (wood-frame & metal cladding)
1916 - Brick factory built encasing original foundry, shop, and offices
1919 - One-storey addition to ends of both bays
Post 1930s - Two-storey addition to ends of both bays
1942 - Garage constructed
Post 1950s - Boarding over windows on bays

Aspects of Integrity

LOCATION Yes No Not Applicable

The location of the building has not been altered.

DESIGN Yes No Not Applicable

The design of the overall building remains intact; however some windows have been boarded over and modern exterior finishes added.

ENVIRONMENT Yes No Not Applicable

The building continues to be located in a residential/industrial neighbourhood south of the downtown core.

MATERIALS Yes No Not Applicable

The authentic materials of the building are intact, albeit some have been boarded over.

WORKMANSHIP Yes No Not Applicable

The high quality of the workmanship of the building is evident in its clean detailing and chosen materials.

FEELING Yes No Not Applicable

The building continues to convey a strong historic sense.

ASSOCIATION Yes No Not Applicable

The association of the building has not been altered; it continues to function as a factory.

Statement of Integrity continued on next page...

Statement of Integrity - Alberta Foundry & Machine Shop (801 Smelter Avenue SE)

Statement of Integrity

Alberta Foundry and Machine Shop maintains all the aspects of integrity necessary for it to convey its significance / heritage value.

The Alberta Foundry and Machine Shop is in good condition with many elements of its original fabric intact. The form, scale, and massing of the Foundry and Machine Shop have been retained; however, some minor modifications have been undertaken. Overall, the concrete foundation is in good condition; however, a substantial crack running through the foundation, brick exterior, and windowsill is evident on the southwest bay. The red pressed brick is in fair condition with numerous previous repairs, infilling, and repointing clearly evident throughout the building's façades, not all of which have been completed in a sympathetic manner. A higher quality red brick was used on the front façade of the building in comparison to the sides and rear of the Alberta Foundry and Machine Shop, which appears to have worn better than the latter. Mortar loss is evident throughout the exterior as is localized staining of the brick beneath the parged windowsills. The lower courses of brick on the front façade show evidence of moisture issues through the presence of efflorescence that should be further studied. Multiple past penetrations through the building's envelope exist, which have not been filled, providing a means for water and pests to infiltrate the building. Failure of the soffit at the southwest bay has resulted in birds nesting in the building's roof. The soffit should be repaired to prevent this from occurring and limit any further damage. Corrugated metal cladding has been installed on the sidewalls of the second storey of the centre section obscuring the underlying brick exterior. The window fenestration on the two side bays are evident; however, a number of the openings on the northeast bay have been filled in with brick. The windows on the southwest bay have been boarded over concealing the original multi-light wooden-sashes, which remain in situ. A number of original single and double assembly wooden-sash windows are intact and efforts should be made to repair and retain these windows. The front façade's parapet has been capped to minimize deterioration. The original loading bay doors have been replaced with metal overhead doors, with the exception of two sliding wooden doors at the rear of the building. Multiple painted ghost signs are evident on the Alberta Foundry and Machine Shop's front façade, which should be conserved to maintain this unique historical element. A maintenance plan should be developed and implemented to ensure the ongoing care of this unique industrial resource.


Additional Images - Alberta Foundry & Machine Shop

1919 photo of the 1916 Alberta Foundry & Machine Shop which encapsulated the original 1911-1914 iron and wood frame structures



Esplanade Archives, Medicine Hat, Alberta.
0055.0857.

Heritage Evaluation Form - Alberta Foundry & Machine Shop (801 Smelter Avenue SE)

	Site Number	Category A
	Community District South Flats	
	Designation	

Site Name(s): Alberta Foundry & Machine Shop			
Municipal Address: 801 Smelter Avenue SE		Date of Construction:	Y 1911-14/1916
Consultant(s): Donald Luxton & Associates Inc.		Evaluation Date:	Y 13 M 05 D 17
Heritage Committee: Heritage Resource Committee			
Heritage Planner: Chris Reddy		Total	
		80	

History (H)	E	VG	G	F	P	(H) SCORE
H.1 Associations/Patterns	X					40
H.2 Age		X				10

Comments: H.1 The Alberta Foundry and Machine Shop is an impressive physical example of Medicine Hat's rich manufacturing industry established during the city's Edwardian economic boom, and for its over one-century-long continuous operation. The Alberta Foundry and Machine Shop is further valued for its significant association with Canada's war effort during the First and Second World Wars through the manufacturing of ammunition.
H.2 Constructed in 1911-1914 and 1916.

Architecture (A)	E	VG	G	F	P	(A) SCORE
A.1 Style/Type/Design	X					40
A.2 Designer/Builder				X		5
A.3 Construction Technology		X				10
A.4 Interior Details					X	0
A.5 Alterations				X		-20

Comments: A.1 The Alberta Foundry and Machine Shop is a handsome and rare example of an Edwardian-style industrial building - locally designed and constructed using locally manufactured materials.
A.2 Architect - J.E. Davies (1911, 1912, 1913, 1914, 1919) and W.D. Lawrence (1916), Contractor - J.E. Davies (1911, 1912, 1913, 1914, 1919) and Morton Fulton (1916)
A.3 Masonry construction with structural steel frame.
A.4 Unknown interior elements.
A.5 Windows boarded over along two side bays. Alterations to original front façade of the building with most wooden-sash windows either damaged or replaced.

Urban Context (C)	E	VG	G	F	P	(C) SCORE
C.1 Landmark/Character		X				10
C.2 Streetscape/Landscape		X				10

Comments: C.1 The Alberta Foundry and Machine Shop is size and unique detailing makes it highly recognizable.
C.2 The building's historic aesthetic contributes significantly to the industrial neighbourhood streetscape.