



Plate 41: Industrial complex, c1920s showing boardwalk over wet land in foreground.

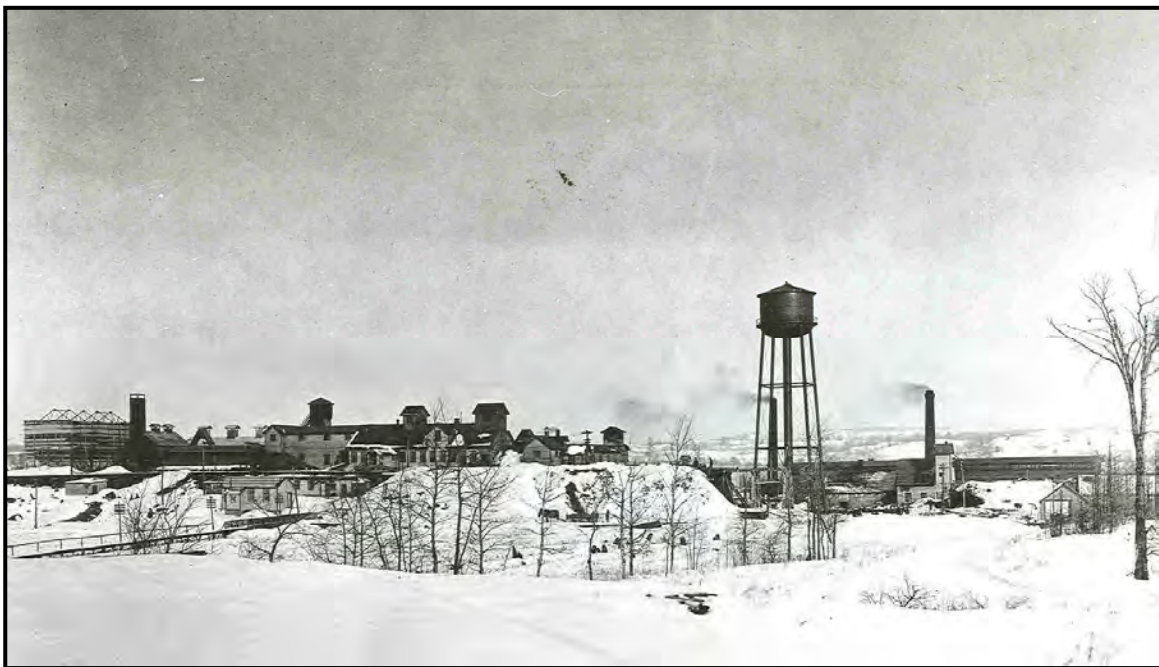


Plate 42: Industrial complex c.1930s.

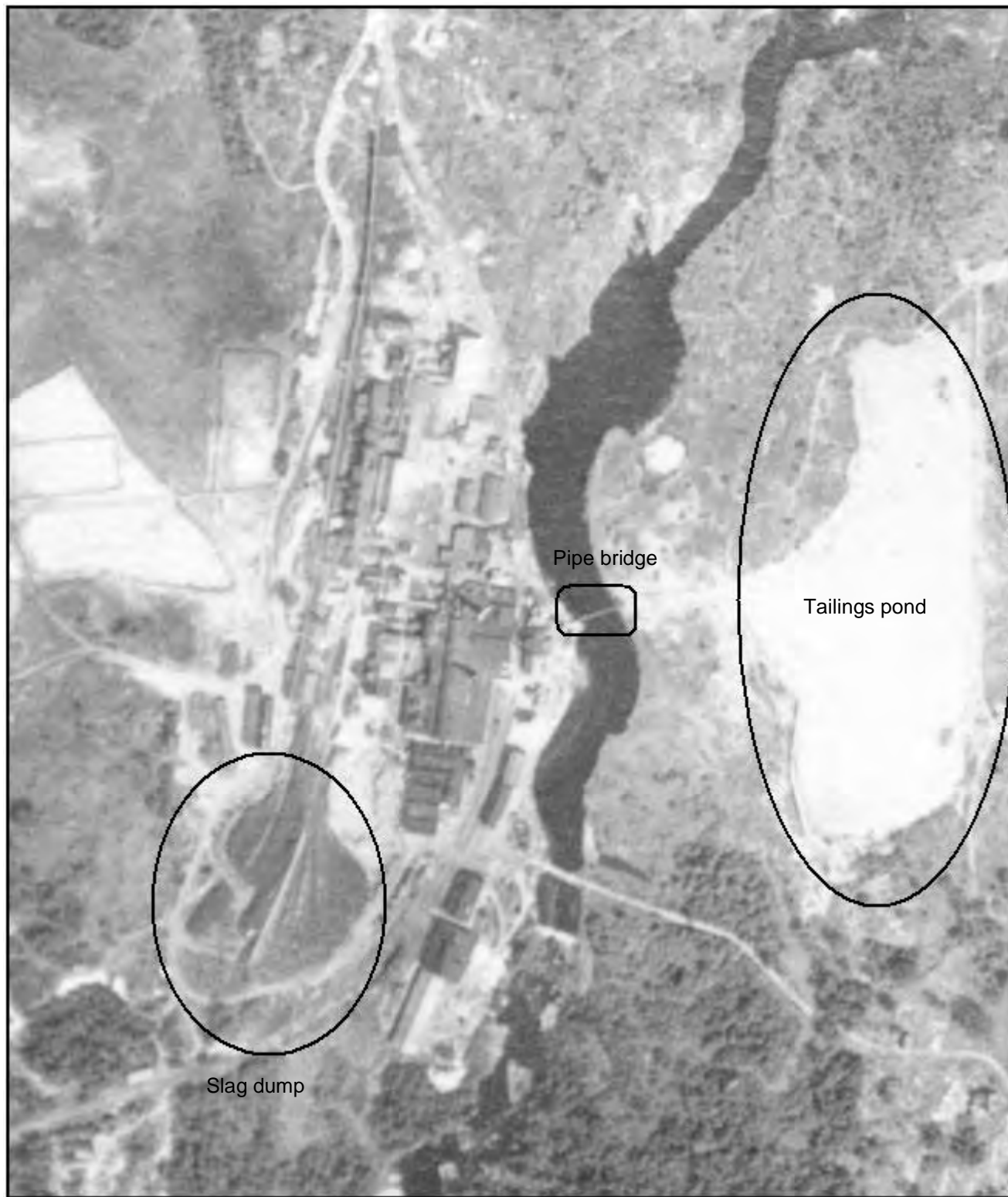


Plate 43: Industrial Complex 1935; tailings pond large white area on right and pipe bridge is evident. Slag dump is fan shaped area in lower left.



Plate 44: Newly constructed research laboratory, now the Arsenic Treatment Facility.

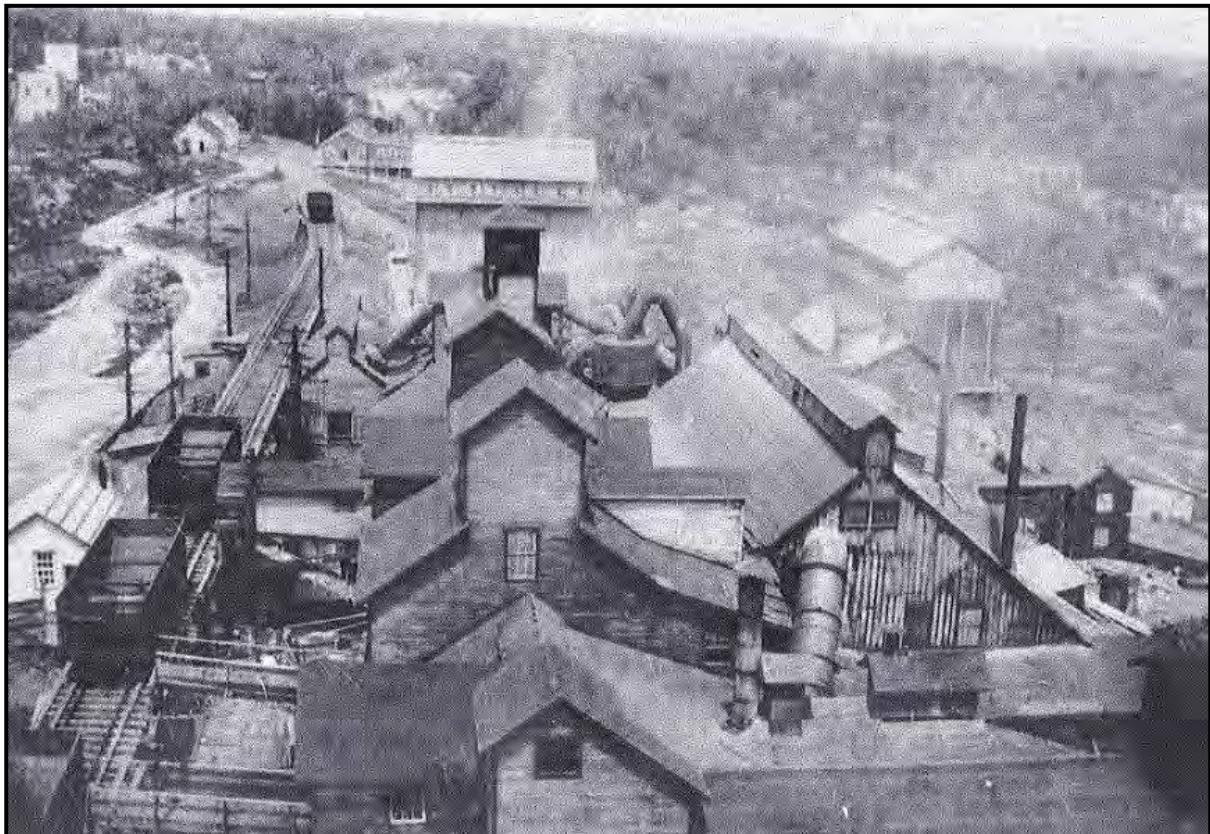


Plate 45: Industrial complex, n.d. Blast furnace centre at top of photo, rail trestle and approach track on left. Arsenic bag house behind blast furnace. "Hub" and kitchen building are in background to the left of the bag house. Transformer building left, rear.



Plate 46: Tailings bridge over Moira River and tailings pond in rear.



Plate 47: Location of dam below bridge, c. 1900.



Plate 48: Dam across Moira River below road bridge in July 2011.



Plate 49: Following dam removal, August 2011. The bridge in background is in same approximate location as Plate 47



Plate 50: Mining Area, 1935



Plate 51: Transformer Building; grass field in foreground was location of powerhouse and Chemical Building.



Plate 52: Fallen hydro pole near Transformer Building.



Plate 53: Initially identified as a “barber shop” but heavy timbers and layout close to former rail right-of-way suggest that this was a loading dock.



Plate 54: Railway right-of-way looking north with Hub ruin on right.



Plate 55: Seven rods on the north bank.



Plate 56: Cobalt oxide shed.



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Plate 57: The four concrete footings and centre riser-pipe foundation supporting the water tank still remained in 2011; the site is used as a small garbage dump.



Plate 58: Research lab, July 2011.



Plate 59: Former ore dock; elevator shaft remains left of centre.



Plate 60: Primary Treatment Plant railway trestle.



Plate 61: Supportive concrete slabs.



Plate 62: Casting Plant, interior.



Plate 63: Exterior of Casting Building facing north.



Plate 64: Slag ingot adjacent to casting building.



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Plate 65: Slag pile beside Casting Building.



Plate 66: Sludge lagoon south of slag field with steel tank and concrete structure in centre of pond.



Plate 67: Calcium Arsenate Dump on left, fenced-in Equalization Pond on right and Arsenic Treatment Plant (former Research Lab) in rear..



9.0 THE PEOPLE

9.1 19th Century Mining

This cultural heritage evaluation report was prepared to assess the physical development of the property and not intended to include the social history of Deloro. Much of the social aspect of Deloro occurred off of the actual mining and smelting property. Nevertheless the labour requirements left features on the property. The emphasis of this chapter is to link the human history to the Deloro Mine Site.¹⁸⁹

Relative to 20th century industrialization, 19th century mining employed few people. The mining era created a casual growth of settlement around the mine. The number of men working at the mine varied considerably over time. For the very early period there are only scattered records. The Powell Mine employed seven or eight men about 1870. At the same time, the main mine owner, W.J. Gatling, had built a boarding house for 30 men.¹⁹⁰ It seems unlikely that more than 50-60 people in total were employed at all the mines then in operation.

Thus, for the small number of workers, accommodation was provided by Gatling's boarding house and perhaps smaller boarding houses associated with the other mines. Also, a few small houses or shacks were built adjacent to the mines such as the two depicted in Figure 5 and Plate 5. In addition men could have boarded in farm houses or walked from the village of Marmora, a few kilometres away.

This ad hoc development was to have changed when Canada Consolidated started to develop the Gatling properties in 1880. During the year, the company had 80 to 90 men working on opening the mine. A mining engineer, R.H. Stretch, commented that the mining and milling operation would require a large number of men and almost certainly a village would grow.¹⁹¹ As a sign of a growing population, a post office was established in December 1881.

The company made plans to accommodate the necessary work force. In 1881 work has begun on the foundations of five blocks to provide ten miner's houses. More grandly, the company built two immense brick houses for the owners/managers (Plate 68).¹⁹² All of these buildings represented the beginning of the subsequent village of Deloro. They were located above the Moira River valley at the point where the surveyed road from Marmora ended. This area would have been dryer and flatter than trying to build in the valley close to the mines. The need to house a large workforce never became urgent. In 1883 mining and refining had ceased.

When Canadian Goldfields reactivated the mines in the late 1890s, the company converted the two-storey brick building as main office on the lower floor and sleeping quarters for single men on the second floor. The three-storey house became a residence for staff with families. In addition, the company erected a hall for their men to use as a church as well as for literary and social purposes (Plate 69).¹⁹³

¹⁸⁹ A social history is covered in a few essays, notably St. Martin, "Chronology of social patterns, Deloro Smelting." 1979

¹⁹⁰ "Vennor "Progress report" GSC, *Report of Progress for 1871-1872*

¹⁹¹ *Canada Consolidated 1880*

¹⁹² *Canada Consolidated 1881*

¹⁹³ Snell, *Mines and Mining*; OBM 1896, 1897



In 1896 Canadian Goldfields employed 70 men. The following year employment was 42 men in underground work and 34 men above ground. By 1898 the labour force had shrunk to 63 men. Yet by 1901, employment had reached 150 people of which half were miners. In 1902 when the mine had flooded, the number of workers had fallen dramatically to ten miners and 35 workers above ground.¹⁹⁴ The 150 men working in 1901 was the largest annual employment during the mining era.

By 1900 Deloro had a telephone service and a horse-drawn bus service connecting the mine site with Marmora.¹⁹⁵

9.2 20th Century Industrialization

9.2.1 Creation of the Village

Between 1907 and 1917 the rapid growth of the labour force demanded new housing facilities (See Table 22). The village of Deloro grew rapidly. In 1911 the *Marmora Herald* commented that eight or nine new houses were being built in the village. In 1916 the company constructed 12 new houses in the village.¹⁹⁶

By 1916, one source noted that the first concrete block houses were built as well as a community hall. There were three houses for company officials, an apartment building with three units, a company house complete for out of town visitors, a rooming house or bunkhouse for single workers, an infirmary, and a store (Plate 72).¹⁹⁷ The Deloro public school opened in February, 1917. In 1918 almost 90 percent of the employees and staff were residents of Deloro. The balance lived in Marmora or Marmora Township. In 1919 the company built a new home in the village for the “young ladies of the office staff.”¹⁹⁸

On February 28, 1918, the *Marmora Herald* published a Notice of Application by the Deloro Smelting and Reduction Company for a special Act of Parliament to incorporate 200 acres of land owned by the company into a village. The settlement at Deloro was too small to incorporate under the provisions of the *Municipal Act*. Given the large amount of taxes paid, the company believed that it was not getting sufficient benefit in return. Needless to say, the Township of Marmora objected to the application and potential loss of revenue (Figure 19).

Nonetheless, it was approved and came into force on January 1, 1919. The Deloro plant manager, S.B. Wright became the first Reeve. This set a precedent that, until 1961 when the plant closed, the plant manager was always elected Reeve of Deloro.¹⁹⁹

¹⁹⁴ OBM 1896, 1897, 1898 1901, 1902

¹⁹⁵ Snell, *Mines and Mining*, p.44

¹⁹⁶ *Mines Report*, 1917, p.155 St. Martin, “Chronology of social patterns, Deloro Smelting.” 1979 p.17

¹⁹⁷ The source given for this is a talk given by Roy Bowles “Deloro and the World” 1980; Baldwin, “Working – and Livin”, 1988

¹⁹⁸ *Marmora Herald*, November 14, 1918, February 27, April 10, April 17, 1919 quoted in St. Martin, “Chronology of social patterns, Deloro Smelting.” 1979

¹⁹⁹ *Ontario Statutes* 8 George 5th Chap 58; Baldwin, “Working – and Livin”, 1988; *Marmora Herald*, March 7, 1918 quoted in St. Martin, “Chronology of social patterns, Deloro Smelting.” 1979



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Another characteristic of company towns was the company store. As early as 1880 a report on the Canada Consolidated Mine commented that as the village grew, opening a “judiciously managed store”, would add considerably to the company’s income. In fact a company store, a cooperative called the Deloro Trading Company, did not open until 1919 (Plate 69).

Shareholders of the cooperative included both the management and employees of the company. Employee participation was a wise move on the part of the company as it insured that village women would shop there rather than in Marmora. At the end of the year shareholders received a small rebate on their annual purchases as a dividend.²⁰⁰

In the end, the company town became obsolete. It was too isolated to attract new workers. In 1956 the Stellite division was relocated to Bellville to be closer to an urban environment attractive enough to hire skilled men.²⁰¹ The remainder of the plan closed in March 1961. The smelting and refining plant at Deloro – the only employer – was closed and demolished. The 45 company-owned houses were sold. In 1970 the post office closed and in 1998 the village was reincorporated back into the Township of Marmora and Lake.

Table 22: Employment Estimates²⁰²

| Year | Estimated Number of Employees |
|------|-------------------------------|
| 1907 | 75 |
| 1912 | c120 |
| 1913 | 130 |
| 1916 | 200 |
| 1917 | 400 |
| 1918 | 250 |
| 1919 | 300 |
| 1920 | c.250-275 men |
| 1921 | c.100 |
| 1922 | 260 |

²⁰⁰ Rothwell *Report Canada Consolidated Gold Mining Company* 1880; *Marmora Herald*, February 27, April 10, April 17, 1919 quoted in St. Martin, “Chronology of social patterns, Deloro Smelting.” 1979; Baldwin, “Working – and Livin”, 1988

²⁰¹ Young, *O'Brien* p.213

²⁰² T&NO Ry. *Mining Industry*. 1912; *OBM*, 1921, p.157, 1922, p.68, 1923, p.91 .; *CDM Mining and Metallurgical Industries 1907-8*; St. Martin, “Chronology of social patterns, Deloro Smelting.” 1979 p.17



9.2.2 Company Labour

During the First World War and up to the Depression, the labour turnover at the Deloro complex was immense. According to one source 30-40 men would arrive by train from Montreal each day and about the same number would quit. Most of these men were described as “foreigners.” Sometime prior to 1918, the company built a dining hall and boarding house that became known as the “Hub”. The ground floor contained a dining room and kitchen while the basement held a store and bake shop. Men’s sleeping quarters were provided on upper floors. It burned in December 1918 and for a time accommodation was provided in the old Canada Goldfields men’s hall, then in use as the village hall, and the old Twenty-Stamp Mill.

In 1919 a new dining room was constructed on the foundation of the old Hub and two bunkhouses were built which could accommodate 150 men each (Plate 70). The bunkhouses were located on the edge of the Moira River north of the plant near the old mines (Plate 71).²⁰³

Very little information was found regarding employee health and safety in the early 20th century. The “Hub” was also used as the company hospital. The village was visited by the company doctor who resided in Marmora. After the Hub burned in 1918, one of the new village residences was converted into a three-patient hospital (Plate 72). After an employee lost his sight in an industrial accident in early 1925, the company established a *Safety First Committee*.²⁰⁴

Not only did “foreigners” create a large turnover in staff, they also had a higher accident rate than “native” employees. In 1928 a total of 126 work days were lost due to accidents. Of these 36 were lost by English speakers while 90 days was lost by “foreigners”. As a result, the *Safety First Committee* recommended that at least one person in a shift of foreign works should speak English.²⁰⁵

Although arsenic is very toxic, there were no references in published sources as to how employees worked safely around the manufacturing area or references to industrial poisonings.

9.3 Material Evidence in 2011

9.3.1 Boarding House Ruins

The ruins consist of concrete foundations of three buildings and are the remnants of the company boarding houses that were built in 1919. They were demolished at some unknown time, probably in the 1930s. The ERA Report concluded that the ruins were in poor condition due to numerous cracks, movement, spalling and vegetation. However, they were directly associated with the social history of the Deloro Mine Site. As a result, ERA recommended that they be retained while also maintaining the extensive vegetation throughout in order to visually connect the buildings with their natural surroundings (Plate 73).

²⁰³ *Marmora Herald*, December 12, 1918 April 10, 1919-p.23 quoted in St. Martin, “Chronology of social patterns, Deloro Smelting.”

²⁰⁴ *Marmora Herald*, April 17, 1918, Jan 5, Oct 4, 1928. Feb 23, 1939 quoted in St. Martin, “Chronology of social patterns.”

²⁰⁵ *Marmora Herald*, Jan 17, 1929 quoted in St. Martin, “Chronology of social patterns.”



Table 23: Boarding House Ruins Cultural Heritage Evaluation

| | |
|---|---|
| Evaluation of Cultural Heritage Value or Interest According to Ontario Regulation 10/06: | |
| Not determined to have 10/06 provincial cultural heritage value or interest | |
| Evaluation of Cultural Heritage Value or Interest According to Ontario Regulation 9/06: | |
| Design or Physical Value: | None noted |
| Historical or Associative Value: | Provided accommodation for transient labour |
| Contextual Value: | Contribute to cobalt smelting era |
| Character Defining Elements: Concrete footings | |

9.3.2 Hub

A section of foundation wall still stands parallel to the former railway track alignment. To the north of this section, the wall has collapsed by being pushed outward by fill. Bedrock outcrops immediately to the east of the foundation. Concrete footings and pads were cast on top of the rock to provide bases for frame construction of the building. A footing surrounded by a debris pile of red brick is located in the approximate location of the brick chimney in Plate 75.

Table 24: Hub Cultural Heritage Evaluation

| | |
|---|--|
| Evaluation of Cultural Heritage Value or Interest According to Ontario Regulation 10/06: | |
| Not determined to have 10/06 provincial cultural heritage value or interest | |
| Evaluation of Cultural Heritage Value or Interest According to Ontario Regulation 9/06: | |
| Design or Physical Value: | None noted |
| Historical or Associative Value: | Provided amenities for transient labour |
| Contextual Value: | Adjacent to former railway line; Contribute to cobalt smelting era landscape |
| Character Defining Elements: Ruined concrete footings | |

9.3.3 Kitchen

The kitchen structure was identified in the Commonwealth study. Plate 42 seems to indicate that it was a wooden structure with a simple gable roof. By the time of the Commonwealth report only the footing survived (Plate 76).



Table 25: Kitchen Cultural Heritage Evaluation

| | |
|---|--|
| Evaluation of Cultural Heritage Value or Interest According to Ontario Regulation 10/06: | |
| Not determined to have 10/06 provincial cultural heritage value or interest | |
| Evaluation of Cultural Heritage Value or Interest According to Ontario Regulation 9/06: | |
| Design or Physical Value: | None noted |
| Historical or Associative Value: | Unknown; possibly supplied food for the Hub |
| Contextual Value: | Adjacent to former railway line; Contribute to cobalt smelting era landscape |
| Character Defining Elements: Foundation of building | |