



BUILDING CONDITION ASSESSMENT

FOR

519 DURHAM REGIONAL ROAD 8, UXBRIDGE

PREPARED FOR:

Township of Uxbridge
Public Works Department
51 Toronto Street South
Uxbridge, ON L9P 1T1

Attention: Ben Kester, CET – Director of Public Works

PREPARED BY:

Sense Engineering Ltd.
15 – 10 Greensborough Village Circle
Markham, ON L6E 1M4

Attention: Chris Moning, P.Eng.

November 10, 2022

Project No. 22tA048A



EXECUTIVE SUMMARY

The Township of Uxbridge Public Works Department retained Sense Engineering to prepare this Building Condition Assessment report for the property at 519 Durham Regional Road 8, Uxbridge to assist in the long-term capital planning for the property.

The property includes a main depot building and three out-buildings (sign shed, salt shed and sand dome). The main depot building was constructed circa 1984. The age of the out-buildings is unknown.

The Building and Property Components section of this report (see Appendix A) details each component of the buildings and property, listed under a system heading. Under each component, there is a brief description of the element, a section on known history of repairs and renewals (where information was available), a section dedicated to our analysis of existing conditions, and then our recommended repair and renewal projects, including costs and timing.

Recommended projects from the Building and Property Component information are included in Table 1 below. This table summarizes our opinion of budgets for capital projects identified in the report that are above the annual threshold of \$10,000. Expenditures that are expected to be managed as operating expenses are not shown. The budgets assume a prudent level of ongoing maintenance. Dollars are inflated by 2.5% per year and include contingencies (typically 5 to 15%) and allowances for design, tender and project management services (5 to 15%), where appropriate. HST has not been included.

Classifications have been provided for each project as follows:

- 1 - Immediate and/or Life Safety Repair
- 2 - Deferred Maintenance Repair
- 3 - Normal Life Cycle Renewal
- 4 - Discretionary Repair or Upgrade

No part of this report should be read in isolation. This report is intended to be read in its entirety, including the scope of work and limitations.



Table 1: Building and Property Expenditures

Analysis Timeframe (yrs) = 10						Projected Expenditures										
				Inflation Rate (%):		-	5%	3%	3%	3%	2%	2%	2%	2%	2%	
Item No.	Component	Project Description	Classes	Present Cost	Occurrences	Cycle	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1 STRUCTURE																
1.1	Structural Frame	Repair Columns and Concrete Block Walls (Preliminary)	3	\$150,000	2023	N/A	\$157,500									
2 BUILDING ENVELOPE																
2.1	Exterior Walls	Exterior Wall Repair Allowance	3	\$25,000	2023, 2028	5	\$26,250					\$29,843				
2.2	Windows and Doors	Replace Original Overhead Doors and Operators	3	\$50,000	2025	20	\$55,697									
		Allowance for Overhead Door and Operator Replacement	3	\$50,000	2028, 2031	3						\$59,686				
2.3	Roofing	Restore Metal Roof	3	\$265,000	2022	20	\$265,000									
4 SITE																
4.1	Site Features and Paving	Replace Asphalt Pavement (Phased)	3	\$250,000	2026, 2027	20						\$286,841	\$292,578			
		Replace Chain Link Fencing	3	\$75,000	2028	35						\$89,529				
4.2	Site Services	Underground Services Repair Allowance	3	\$25,000	2025	10	\$27,849									
5 HVAC																
5.1	Heating and Cooling	Replace 3 Ton GSHP	3	\$19,000	2022	25	\$19,000									
		Replace Two 6 Ton GSHPs	3	\$43,400	2023	25	\$45,570									
7 ELECTRICAL																
7.1	General	Electrical Equipment Renewal Allowance	3	\$30,000	2029	45	\$36,528									
8 OUT-BUILDINGS																
8.1	General	Replace Wood Cladding on Salt Shed	3	\$50,000	2025	25						\$55,697				
		Design New Salt Dome	4	\$30,000	2023	50	\$31,500									
		Demolish and Replace Salt Dome (Preliminary)	4	\$300,000	2024	50						\$324,450				
Total Present Cost:				\$1,362,400	Total:		\$284,000	\$260,820	\$324,450	\$139,243	\$286,841	\$292,578	\$179,058	\$36,528	\$0	\$63,339

TABLE OF CONTENTS

1. SENSE'S SCOPE OF WORK

2. INFORMATION PROVIDED

2.1 Questionnaire

2.2 Reports

1

2

2

2

APPENDICES

- A Building and Property Components
- B Limitations



1. SENSE'S SCOPE OF WORK

The Township of Uxbridge Public Works Department retained Sense Engineering to prepare this Building Condition Assessment report in accordance with our proposal dated September 30, 2022.

The purpose of our report was to provide a general indication of the present physical condition of the visually accessible buildings and surrounding property finishes. As per our proposal, we were to record deficiencies and conditions which would likely require capital expenditures greater than \$10,000 per year within the next 10 years. Expenditures associated with normal operations, routine maintenance, or where costs are less than \$10,000, are not included as they are expected to be covered by operating budgets. Costs associated with interior finishes, fixtures and equipment have also been excluded as the scope and frequency of interior refurbishments are typically based on discretionary management decisions rather than engineering judgement.

Our review was intended to identify conditions resulting from past and current use of the property. Should change of use, renovations or additions be anticipated, additional evaluations may be required.

Concealed deficiencies and design flaws, and identification of environmental issues, are specifically excluded from our mandate. Our scope of review should not be considered exhaustive or be considered to eliminate all risks associated with owning this property. Only conditions seen during our review of sample areas can be said to have been appraised, and our general comments on the components and systems are assumptions based upon extrapolations.

Our interviews with building personnel attempt to uncover concerns with the buildings and surrounding property. However, we cannot attest to the integrity of the information provided, nor can we attest to the accuracy or completeness of the information or data provided for our review and incorporation into our report.

Repair and replacement costs are based on past and current uses and layouts. Opinions of costs are determined based on our past experience with similar projects and should be considered as preliminary budgets only.

This Building Condition Assessment report is intended to be a useful tool in supporting your ongoing planning for capital needs related to the property. As part of this, we were to:

- complete a top-to-bottom review so that the Township staff and Council can prioritize the various capital projects competing for funds;
- provide a plan that is neither too conservative nor too aggressive, but is rather based on most probable and reasonable scenarios, based on your specific ownership / management strategy, when this is communicated to us;
- provide various repair / replacement options and strategies, wherever possible, rather than just presenting default (and often most conservative) solutions; and
- capture expenditures exceeding an annual threshold cost of \$10,000 per building over the next 10-year period.

As part of our review and preparation of this report, Sense reviewed the building structure, envelope, portions of the interior and the site. Sense also completed a non-specialist review of the mechanical, plumbing, active life safety and electrical systems. Comments about these systems are based on issues identified to us by building operation staff, service contractors or which are visually apparent to a non-specialist.



In preparing this report, we have:

- Reviewed the information provided (see Section 2 below) to assist in understanding the:
 - general construction of the buildings and property;
 - type and level of maintenance and repairs carried out in the past and planned for the future; and
 - nature and extent of any problem conditions.
- Completed a sample review of the building and property components where visually accessible to check existing conditions on October 20, 2022. Specifically, we reviewed exteriors walls, roofs from grade and site. Our observations were made from the ground and common and service areas.

Chris Moning, P.Eng. and Stephanie Koo, EIT reviewed the site and prepared this report on behalf of Sense Engineering. Bill Sullivan, B.Eng., P.Eng., peer reviewed this report.

This report is subject to the Limitations forming Appendix B.

2. INFORMATION PROVIDED

Information was provided from the following sources, which in part form the basis of our report.

2.1 Questionnaire

We prepared and issued a property information and performance history questionnaire for the Owner's representative to complete. This information was reviewed and discussed with Mr. Ben Kester, CET (Director of Public Works) who further answered our questions concerning the performance of the various systems, existing capital projects and plans.

2.2 Reports

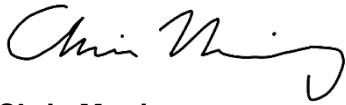
The following reports were provided:

- Designated Substances Survey prepared by WSP Golder, dated July 21, 2022;
- Tender Documents for the Metal Roof Restoration project prepared by TSS Building Science, dated August 19, 2022
- Report PWO-55/22 prepared by Public Works and Operations dated September 12, 2022; and
- Quotes for replacement of the ground source heat pumps provided by Quest Geothermal.



Should you have any immediate questions, please feel free to contact us.

Yours Truly,
Sense Engineering



Chris Moning, P.Eng.
Project Manager (289) 244-1543



Bill Sullivan, P.Eng.
Founding Principal (905) 490-8036



APPENDIX A – BUILDING AND PROPERTY COMPONENTS

Table of Contents

1. STRUCTURE.....	2
1.1 Structural Frame.....	2
2. BUILDING ENVELOPE.....	4
2.1 Exterior Walls.....	4
2.2 Windows and Doors.....	6
2.3 Roofing.....	8
3. FIRE SAFETY.....	9
3.1 General.....	9
4. SITE.....	10
4.1 Site Features and Paving.....	10
4.2 Site Services.....	12
5. HVAC.....	13
5.1 Heating and Cooling.....	13
5.2 Exhaust Systems.....	14
6. PLUMBING.....	15
6.1 Domestic Water System.....	15
7. ELECTRICAL.....	16
7.1 General.....	16
8. OUT-BUILDINGS.....	17
8.1 General.....	17

Note: Sections 1 through 7 solely relate to the main depot. Section 8 covers the out-buildings.



1. STRUCTURE

1.1 STRUCTURAL FRAME

BRIEF DESCRIPTION:

The structural frame of the main depot consists of a metal roof deck supported on steel beams, steel girders and steel columns. There are also concrete block partition walls. The mezzanine level at the west end of the main depot has wood sub-floors, on wood joists, supported by concrete block supporting walls. The floor is a concrete slab-on-grade.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the structural frame.

PRESENT CONDITIONS AND RECOMMENDATIONS:

Corrosion was noted at the base of numerous structural steel members. There is also freeze-thaw damage (scaling) at the base of the concrete block walls. Both conditions are a result of repeated wetting over the building's service life exacerbated by exposure to de-icing salts.

Impact damage to the columns at the centre of the east room was also noted, most likely caused by vehicle impact. Further analysis is required to confirm the exact repair requirements. Pending this, we have included a preliminary budget to repair the impact damage. The budget allocated also includes an allowance for repairing the worst areas of scaling on the concrete block walls.

There is also scaling on the top surface of the slab-on-grade. As the scaling is not affecting use and is not a structural concern, we have not included a budget for related repairs.



Photo 1: Typical structure.



Photo 2: Corrosion at the base of a column.

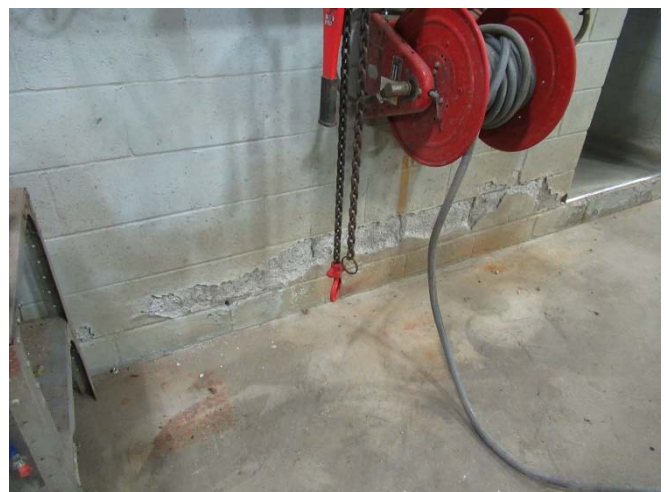


Photo 3: Scaling at the base of a concrete block wall.



CAPITAL PROJECTS:

Description	Classification	Present Cost	Timing (Year)	Cycle (Years)
Repair Columns and Concrete Block Walls (Preliminary)	3	\$150,000	2023	N/A



Photo 4: Impact damage to a steel column.



Photo 5: Impact damage to a steel column.



2. BUILDING ENVELOPE

2.1 EXTERIOR WALLS

BRIEF DESCRIPTION:

The exterior walls are predominately clad with corrugated metal cladding. There is split-face concrete block cladding on the west and south elevations of the building.

The joints at the window and door perimeters, and between changes in cladding types, are typically sealed with a flexible caulking material.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the exterior walls.

PRESENT CONDITIONS AND RECOMMENDATIONS:

We were not made aware of any reports or evidence of active water leakage through the exterior walls.

The exterior walls and sealants were generally observed to be in fair condition. However, we noted the following items of concern during our review:

- localized failed sealants;
- some missing/loose fasteners and flashings;
- localized deteriorated mortar joints;
- some corrosion and impact damage to the sheet metal cladding; and
- faded finish on sheet metal cladding on the east and north elevations.

While most of these conditions do not require immediate attention, we have included periodic allowances within the reporting term to complete repairs to the exterior walls, including localized sealant, fastener replacement, localized block replacement and repointing deteriorated/missing mortar joints, and localized sheet metal repairs.

The faded finish on the sheet metal cladding is an aesthetic issue and refinishing is largely dependent on owner objectives. Given the utilitarian usage, we have not included a budget for this.



Photo 6: North elevation.



Photo 7: South elevation.



Photo 8: Corrosion and impact damage at bottom of metal cladding on the north elevation.



CAPITAL PROJECTS:

Description	Classification	Present Cost	Timing (Year)	Cycle (Years)
Exterior Wall Repair Allowance	3	\$25,000	2023 2028	5



2. BUILDING ENVELOPE

2.2 WINDOWS AND DOORS

BRIEF DESCRIPTION:

The windows are punched prefinished aluminum framed windows on the west and south elevations with fixed double-glazed insulating glass units (IGUs), two sets of single-glazed horizontal sliders and metal spandrel panels above and below them.

The man doors are typically painted metal swing doors. There are insulated metal sectional overhead doors, some with glazed inserts, with power openers.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the windows and doors.

PRESENT CONDITIONS AND RECOMMENDATIONS:

The windows are original to the building, making them about 38 years old. We were not made aware of any reports of water leakage through the windows or doors, nor did we see any evidence of leakage in the areas we reviewed.

Based on age and reported performance, we have not included a budget for general window replacement. We assume ongoing repairs (i.e. replacing weatherstripping and rollers, adjusting frames/sashes, etc.) will be completed on an as-needed basis funded out of operating budgets.

The swing doors generally did not self-close and there was corrosion at the base of some door frames. We assume that repairs and replacement of individual doors will be managed on an as-needed basis funded out of operating budgets. As such, no capital expenditures have been included.

We were not made aware of any issues with the operation of the overhead doors. The doors have reportedly been periodically replaced over the last ten years with two original doors remaining. We have budgeted for replacement of the original overhead doors and operators as they have reached the end of their service life. We have



Photo 9: Typical windows.



Photo 10: Typical swing door.



Photo 11: Typical overhead doors.



also included a periodic allowance for overhead door and operator replacement which accounts for two doors/operators every three years.

CAPITAL PROJECTS:

Description	Classification	Present Cost	Timing (Year)	Cycle (Years)
-------------	----------------	--------------	---------------	---------------

Replace Original Overhead Doors and Operators	3	\$50,000	2025	20
Allowance for Overhead Door and Operator Replacement	3	\$50,000	2028 2031	3



2. BUILDING ENVELOPE

2.3 ROOFING

BRIEF DESCRIPTION:

The roof is sloped and covered with prefinished sheet metal panels. The roof drains into eavestroughs that in turn discharge at grade via downspouts.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

2022: Roof scheduled to undergo restoration (recoating and resealing) at a cost of about \$265k including contract administration fees according to correspondence with the Township of Uxbridge.

PRESENT CONDITIONS AND RECOMMENDATIONS:

Based on discussion with site staff, we understand that there is currently a leak at a roof penetration near an overhead door. We expect this will be addressed as part of the upcoming restoration project which also includes localized sheet metal repairs, applying a fluid-applied coating over the existing metal roofing and replacing the eavestrough leaf guard.

CAPITAL PROJECTS:

Description	Classification	Present Cost	Timing (Year)	Cycle (Years)
Restore Metal Roof	3	\$265,000	2022	20



Photo 12: View of metal roof.



Photo 13: Reported roof leak location.



3. FIRE SAFETY

3.1 GENERAL

BRIEF DESCRIPTION:

The building is protected by a simple fire alarm system consisting of heat detectors connected to a keypad panel.

There are portable fire extinguishers located throughout the building.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the fire safety systems.

PRESENT CONDITIONS AND RECOMMENDATIONS:

There are no reported issues with the fire alarm system and the building staff indicated the fire extinguishers are inspected regularly (consistent with the inspection tags we checked). Given their limited extent, we expect repair or replacement of the fire safety systems can be managed at a cost below the reporting threshold.



Photo 14: Alarm system keypad panel.

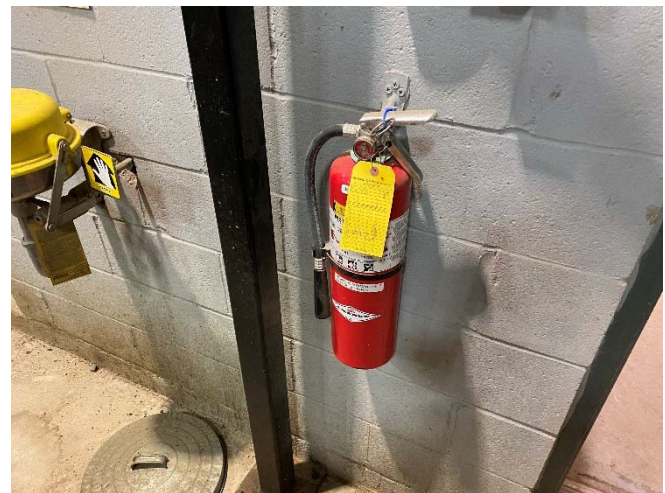


Photo 15: Typical portable fire extinguisher.



4. SITE

4.1 SITE FEATURES AND PAVING

BRIEF DESCRIPTION:

The site features and paving include:

- *Paving:* The site is accessed via an asphalt paved driveway from Regional Road 8. There is also asphalt pavement predominately at the north end of the property adjacent to the main depot, sand dome and salt shed. There is concrete paving at the diesel fuel station. The remainder of the driving/parking surfaces are a mix of dirt and granular materials.
- *Concrete Curbs:* There are concrete curbs at the asphalt pavement perimeter near the sand dome.
- *Soft Landscaping:* There are trees and grass areas throughout the property.
- *Fences:* There is chain link fencing with barbed wires around the perimeter of the property.
- *Property Signage:* There is a sign at the north end of the property.
- *Site Furnishings:* There is a picnic table, a flagpole and smaller sheds.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the site features and paving.

PRESENT CONDITIONS AND RECOMMENDATIONS:

The asphalt pavement is serviceable but generally in poor condition. There are potholes, alligator cracks, sections of missing pavement and water ponding throughout. Given the current extent of deterioration, we have carried a budget as provided by the Town for replacing the asphalt paving, in the short-term. This work is scheduled to be completed after the replacement of the sand dome (see the Section 8 *Out-Buildings* portion of this report for further information).



Photo 16: Asphalt pavement.



Photo 17: Dirt and granular parking area.

The chain link fencing was weathered and there is corrosion on the rails, posts and chain link. We have budgeted for replacing the chain link fencing.

We assume that maintenance of the soft landscaping will be funded out of operating budgets. Similarly, we assume that local repairs or replacement of the picnic table, flagpole, smaller sheds and site signage will be funded out of operating budgets.



CAPITAL PROJECTS:

Description	Classification	Present Cost	Timing (Year)	Cycle (Years)
Replace Asphalt Pavement (Phased)	3	\$250,000	2026 2027	20
Replace Chain Link Fencing	3	\$75,000	2028	35



4. SITE

4.2 SITE SERVICES

BRIEF DESCRIPTION:

The site services include buried electrical, stormwater, septic and water supply services to and from the property.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the site services.

PRESENT CONDITIONS AND RECOMMENDATIONS:

The incoming services are primarily buried and cannot be evaluated visually. Regular scoping and camera inspections are recommended to visually inspect the buried services.

We have included a periodic allowance for repairs to the site services to address leaking/frozen pipes and other damage/deterioration of the incoming services.

CAPITAL PROJECTS:

Description	Classification	Present Cost	Timing (Year)	Cycle (Years)
-------------	----------------	--------------	---------------	---------------

Underground Services Repair Allowance	3	\$25,000	2025	10
---------------------------------------	---	----------	------	----



5. HVAC

5.1 HEATING AND COOLING

BRIEF DESCRIPTION:

A portion of the main depot building is heated and cooled by a ground source heat pump system. There is a 3 ton unit on the mezzanine that heats and cools the office, kitchen and bathrooms, and two 6 ton units that heat and cool the two conditioned shop bays.

There are also supplemental electrical unit heaters in the bays and electric baseboard heaters in the office, kitchen and bathrooms.

The back six shop bays in the main depot are unconditioned.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the heating and cooling systems.

PRESENT CONDITIONS AND RECOMMENDATIONS:

According to Management, the heat pumps are in poor condition and the Town is in the process of obtaining quotes for their replacement. We understand the 3 ton unit is being replaced immediately and the two 6 ton units may be replaced within the next year. We have included projects in the capital plan based on the quote provided.

We have assumed that the electric unit heaters and baseboard heaters will be replaced on an individual, as-needed basis as part of ongoing maintenance.



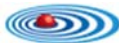
Photo 18: 6 ton ground source heat pump unit.



Photo 19: Supplemental electric unit heater.

CAPITAL PROJECTS:

Description	Classification	Present Cost	Timing (Year)	Cycle (Years)
Replace 3 Ton GSHP	3	\$19,000	2022	25
Replace Two 6 Ton GSHPs	3	\$43,400	2023	25



5. HVAC

5.2 EXHAUST SYSTEMS

BRIEF DESCRIPTION:

There is a direct extraction truck exhaust system on the conditioned side of the main depot which is used as needed.

There are two wall mounted exhaust fans on the unconditioned side which appear to be controlled by timers.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the exhaust systems.

PRESENT CONDITIONS AND RECOMMENDATIONS:

There are no reported issues with the truck exhaust system or exhaust fans. We assume repair or replacement of the exhaust systems will be completed on an individual, as-needed basis at a cost below the reporting threshold.



Photo 20: Truck exhaust system.



Photo 21: Typical wall mounted exhaust fan.



6. PLUMBING

6.1 DOMESTIC WATER SYSTEM

BRIEF DESCRIPTION:

There is a well located on the north side of the main depot building that provides domestic water to the property. There is a pump in the well set at 95' depth which is piped underground and enters the building in the main mechanical and electrical room. There is an expansion tank, electric hot water heater and water softener connected to the system as well. The domestic hot water heater was manufactured by Giant (Model #152B-3F7M) and has a storage capacity of 181L.

Where visible in the mechanical and electrical room, the distribution piping is copper and PEX.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

- | | |
|-------|--|
| 2016: | Replaced domestic hot water heater, cost not provided. |
| 2017: | Replaced well pump, cost not provided. |

PRESENT CONDITIONS AND RECOMMENDATIONS:

The domestic water system is in serviceable condition and Management did not report any major issues. Based on the age and reported condition of the domestic water system, no capital expenditures are anticipated within the report term. Local pipe repairs and replacement of individual components is expected to be funded from operating budgets.



Photo 22: Incoming line from well and expansion tank.



Photo 23: Hot water heater and water softener.



7. ELECTRICAL

7.1 GENERAL

BRIEF DESCRIPTION:

Electricity is supplied to the property via underground service lines from pole mounted transformers located on the main road.

The main disconnect switch is located in the main depot's electrical room and is rated at 600A and 600V. There are two transformers that step down the power to 120/240V and a 240V splitter that distributes the power to various sub-panels and disconnect switches.

The interior lighting consists of strip fixtures with LED and T8 lamps and ceiling hung high bay type lighting with high intensity discharge (HID) and LED lamps. There are also pole mounted lights (lamp type not confirmed) and HID wall packs on the exterior.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the electrical systems.

PRESENT CONDITIONS AND RECOMMENDATIONS:

Major electrical equipment has an average service life of about 40 to 50 years. Given the age of the building, it is likely that some capital expenditures will be needed, but it is difficult to predict the scope and timing of such work in advance. As a placeholder, we have budgeted for replacing the main disconnect switch, the transformers and splitter.

The lighting fixtures are in serviceable condition, where reviewed. The current interior lighting levels appeared to meet minimum by-law requirements and are reasonably energy efficient. We assume that the lighting will typically be replaced on an as-needed basis out of the operating budget.



Photo 24: Electrical room.

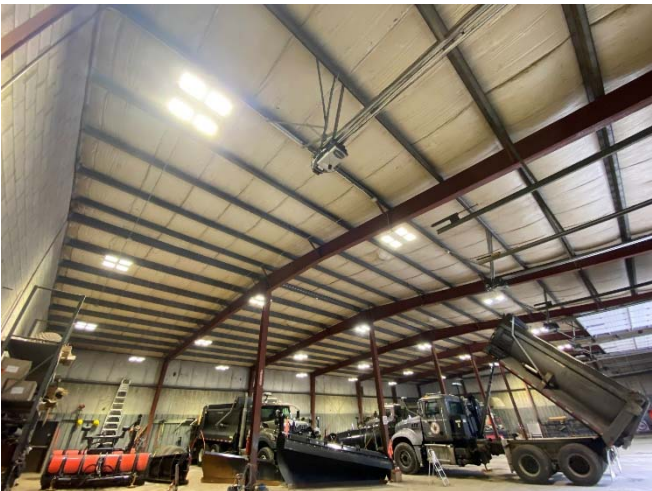


Photo 25: High bay LED lighting.

CAPITAL PROJECTS:

Description	Classification	Present Cost	Timing (Year)	Cycle (Years)
Electrical Equipment Renewal Allowance	3	\$30,000	2029	45



8. OUT-BUILDINGS

8.1 GENERAL

BRIEF DESCRIPTION:

The out-buildings on the property include the following:

- *Sign Shed:* Wood-framed structure with corrugated metal cladding and sloped metal roofing. One metal sectional overhead door and one painted metal swing door. There is a 100A electrical sub-panel that serves outlets and lighting throughout.
- *Salt Shed:* Wood-framed structure with wood cladding and a sloped metal roof. One metal sectional overhead door and one painted metal-skinned wood swing door. The interior and exterior lights and outlets which are fed underground from the main depot.
- *Sand Dome:* Wood-framed structure on reinforced concrete foundations. Roof covered with asphalt shingles. The interior and exterior lights and outlets are fed underground from the main depot. There is an exhaust fan near the top of the dome which is controlled by a manual switch near the dome's entrance.

MAINTENANCE, REPAIR AND RENEWAL HISTORY:

No significant capital projects were reported to have been completed in relation to the out-buildings.

PRESENT CONDITIONS:

Sign Shed

Most of the structural components were concealed from view by stored materials at the time of our review. We did not see any evidence of unusual settlement, displacement or structural cracking in the exposed areas.

The sheet metal cladding is faded and there is minor impact damage.

We were not made aware of any issues with the operation of the overhead door and the swing door was in serviceable condition.



Photo 26: Sign shed exterior.



Photo 27: Sign shed interior.



Photo 28: Salt shed exterior.



The electrical sub-panel does not appear to be rated for outdoor use and the casing has started to corrode.

Salt Shed

The lower half of the structural components were concealed from view by a combination of stored materials and boards. We did not see any evidence of unusual settlement, displacement or structural cracking in the areas we reviewed.

There was water staining on the interior walls and the wood cladding was generally weathered.

We were not made aware of any operational issues with the overhead or swing doors and they appeared to be in serviceable condition.

Sand Dome

Most of the interior face of the foundation walls was concealed below-grade and by stored materials (sand). In the visible areas, the concrete is extensively delaminated (corrosion damaged) and there are large areas of exposed and heavily corroded reinforcing steel.

Deterioration of the wood structural members were also noted at the opening to the dome.

Approximately half of the asphalt shingles were deteriorated and several are missing.

RECOMMENDATIONS:

We assume that repairs and localized replacement of the out-building doors will be managed on an individual, as-needed basis funded out of operating budgets. As such, no capital expenditures have been included.

Localized repairs to the cladding are expected to be addressed out of the exterior wall repair allowance (see the *Exterior Walls* section of this report for further details).

The faded finish on the metal cladding and roofing is a largely an aesthetic issue. Given the utilitarian nature of the out-buildings, we have assumed that the cladding and roofing will not be refinished within the reporting term.



Photo 29: Salt shed interior.



Photo 30: Sand dome exterior.



Photo 31: Delaminated (corrosion damaged) sand dome concrete foundation walls with exposed reinforcing steel.



We have included a budget to re-clad the salt shed as the wood cladding is heavily weathered and there is evidence of leakage on the interior.

We understand that the current sand dome will be demolished, and a larger dome (or building) will be built in its place within the next one to two years. We have included budgets for both the design and construction. As the size, orientation and construction of the new salt facility is not yet known, the construction budget should be considered preliminary.

We expect the sign shed electrical sub-panel will require replacement within the reporting term but have not included a budget since it can be replaced at a cost below the reporting threshold. We also expect the out-building lighting can be replaced on an as-needed basis funded from operating budgets.

CAPITAL PROJECTS:

Description	Classification	Present Cost	Timing (Year)	Cycle (Years)
-------------	----------------	--------------	---------------	---------------

Replace Wood Cladding on Salt Shed	3	\$50,000	2025	25
Design New Salt Dome	4	\$30,000	2023	50
Demolish and Replace Salt Dome (Preliminary)	4	\$300,000	2024	50



APPENDIX B – LIMITATIONS

No party other than the Client (*Township of Uxbridge Public Works Department*) shall rely on the Consultant's work without the express written consent of the Consultant (*Sense Engineering Ltd.*). The scope of work and related responsibilities are defined in the Consultant's proposal and Conditions of Assignment. Any use which a third party makes of this work, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Decisions made or actions taken as a result of our work shall be the responsibility of the parties directly involved in the decisions or actions. Any third party user of this report specifically denies any right to any claims, whether in contract, tort and/or any other cause of action in law, against the Consultant (including Sub-Consultants, their officers, agents and employees).

The work reflects the Consultant's best judgement in light of the information reviewed by them at the time of preparation. Unless otherwise agreed in writing by the Consultant, it shall not be used to express or imply warranty as to the fitness of the property for a particular purpose. This is not a certification of compliance with past or present regulations. No portion of this report may be used as a separate entity; it is written to be read in its entirety.

This work does not wholly eliminate uncertainty regarding the potential for existing or future costs, hazards or losses in connection with a property. No physical or destructive testing and no design calculations have been performed unless specifically recorded. Conditions existing, but not recorded, were not apparent given the level of study undertaken. Only conditions actually seen during examination of representative samples can be said to have been appraised and comments on the balance of the conditions are assumptions based upon extrapolation. We can perform further investigation on items of concern, if so directed.

Only the specific information identified has been reviewed. The Consultant is not obligated to identify mistakes or insufficiencies in the information obtained from the various sources or to verify the accuracy of the information.

The Consultant was not to investigate or provide advice, and is not investigating or providing advice, about pollutants, contaminants, hazardous materials or communicable diseases/viruses.

The Client and other users of this report expressly deny any right to any claim, including personal injury claims, which may arise out of pollutants, contaminants or hazardous materials, including but not limited to asbestos, mould, mildew or other fungus.

Budget figures are our opinion of a probable current dollar value of the work and are provided for approximate budget purposes only. Accurate figures can only be obtained by establishing a scope of work and receiving quotes from suitable contractors.

Time frames given for undertaking work represent our opinion of when to budget for the work. Failure of the item, or the optimum repair/replacement process, may vary from our estimate.

The liability of Sense Engineering is limited to the Client in Contract and Tort to the extent and time period identified in our proposal. The Client expressly agrees that the individuals engaged by the Consultant shall have no personal liability to the Client in respect of a claim, whether in contract, tort and/or any other cause of action in law. The Client expressly agrees that it will bring no proceedings and take no action in any court of law against any of the individuals in their personal capacity.

