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Report for:

VILLAGE OF CREMONA

PUBLIC WORKS SHOP & WATER TREATMENT PLANT

BUILDING CONDITION ASSESSMENT

Prepared By:

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Date: May 8, 2026

Project #: 2490-019-01

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Village of Cremona
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May 8, 2026
File: N:\2490-019-01\L01-1.0

Attention: Karen O'Connor
Chief Administrative Officer

Dear Ms. O'Connor

Re: Public Works Shop & Water Treatment Plant Building Condition Assessment

We are pleased to submit a report for the above referenced Building Condition Assessment. We thank you for the opportunity to be of service and to have prepared this report on your behalf. MPE can offer Structural, Mechanical, Electrical and Civil engineering services if the Village would like to proceed with the repairs and recommendations made within this report.

Should you have any questions or require additional information, please contact the undersigned.

Yours truly,

MPE a division of Englobe

A handwritten signature in black ink, appearing to read "MD", with a long horizontal stroke extending to the right.

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MHD:DB

CORPORATE AUTHORIZATION

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Should any questions arise regarding content of this report, please contact the undersigned.

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Date	May 8th, 2026
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The Association of Professional Engineers and Geoscientists of Alberta (APEGA)	

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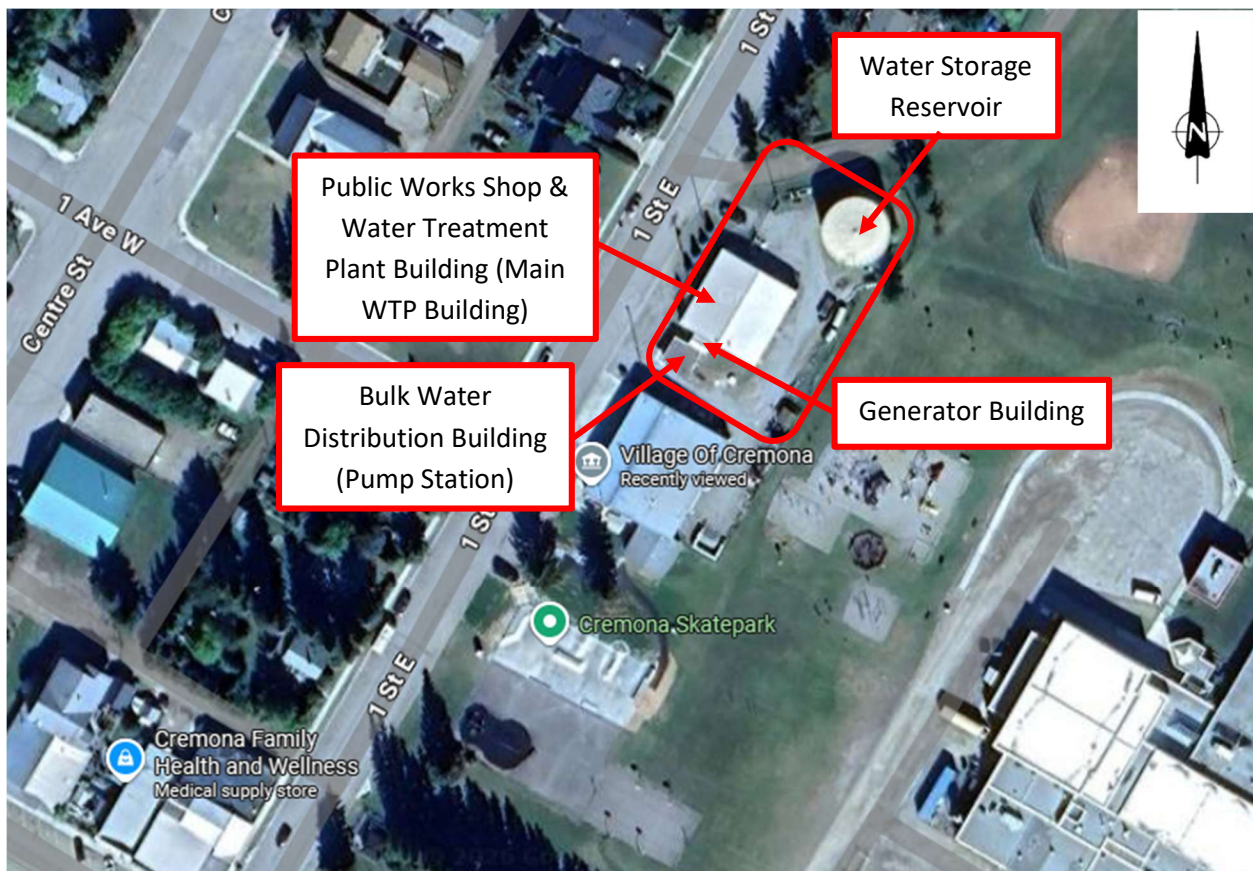
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APPENDIX A : FACILITY EVALUATION FORMS

1 INTRODUCTION

The Village of Cremona (Village) has retained MPE a division of Englobe (MPE) to conduct a Building Condition Assessment of the Village of Cremona Public Works Shop (PWS) and Water Treatment Plant (WTP) Building located at 209 1 Street, Cremona, Alberta. The site has three building structures and a Water Storage Reservoir on site that were also assessed including the Main WTP Building, Bulk Water Distribution Building, Generator Building, and Water Storage Reservoir. The Water Storage Reservoir was just assessed from a site, envelope, and structural perspective based on what was visible from the exterior ground level. The purpose of the following assessment is to determine the general condition of the building and to provide recommendations for repair and maintenance in an effort to aid the Village in asset maintenance planning.



1.1 LIMITATION OF ASSESSMENT

Some pages from the existing drawings for the Generator Building prepared by Lee Maher Engineering Associates Ltd. dated July 1992 and some pages from the existing record drawings for the Bulk Water Distribution Building prepared by Underwood McLellan & Associates Ltd. dated August 1962, were available for review. This assessment is limited to a visual review of the exposed interior and exterior building components. Below grade or concealed structural, mechanical, or electrical components were not assessed. Exterior soil properties, foundations and water tables were also not assessed.

The review of the building envelope is based on the observed visual condition at the time of inspection only. Its performance as it relates to the current edition of the National Energy Code of Canada for Buildings was not evaluated as part of this assessment.

Please note the recommendations in this report are based on our professional experience and judgement. The costs presented herein are established with broad unit rates that are subject to change as a result of inflation, contractor discretion, tariffs, and price/availability of materials at the time of repair.

1.2 SITE INVESTIGATION

MPE performed site investigations on April 7th and 8th, 2026, which were conducted by MPE personnel Ian Cabales (Electrical), Dallin Bullock (Mechanical) and Marshall Dushinski (Site/Structural/Envelope). Various Village of Cremona employees were also present while the investigations were taking place.

2 BUILDING CONDITION ASSESSMENT

2.1 EXISTING CONSTRUCTION

2.1.1 Roofs

2.1.1.1 MAIN WTP BUILDING

The Main WTP Building is a pre-engineered steel framed structure. The roof structure of the building consists of steel beams, purlins; and cross bracing. The roof is covered by a pre-finished corrugated steel roof cladding. Roof insulation is unknown as an vapour barrier is installed throughout the ceiling interior which conceals most of the building envelope.



Figure 1: Main WTP Building Roof Interior

2.1.1.2 BULK WATER DISTRIBUTION BUILDING

The Bulk Water Distribution building is a concrete masonry unit (CMU) block wall structure with a wood framed roof. The roof consists of three built-up solid sawn lumber beams topped with rough sawn wood plank decking. The roof is a gravel roof, though visibility was limited during the assessment.



Figure 2: Bulk Water Distribution Building Roof Interior

2.1.1.3 GENERATOR BUILDING

The Generator Building is a pre-engineered and prefabricated light gauge steel framed building. The roof consists of an exterior and interior steel liner which concealed the remainder of the roof building envelope.



Figure 3: Generator Building Roof Interior

2.1.1.4 WATER STORAGE RESERVOIR

The Water Storage Reservoir is suspected to be a reinforced cast-in-place concrete structure. Roof and interior access were not permitted during the inspection, substantially limiting the condition assessment of the roof slab and decking.

2.1.2 Walls

2.1.2.1 MAIN WTP BUILDING

The roof structure of the Main WTP Building consists of steel columns, purlins; and cross bracing; however, some of the steel framing throughout the building is concealed. The walls are covered by a pre-finished corrugated steel cladding. Wall insulation is unknown as an plastic liner is installed throughout the interior which conceals most of the building envelope.



Figure 4: Main WTP Building Walls Exterior

2.1.2.2 BULK WATER DISTRIBUTION BUILDING

The Bulk Water Distribution Building walls are built with CMU blocks. The top approximately 406mm (16") of the west wall is wood framed. There is no insulation on the exterior walls, and they are painted with a white exterior grade paint.

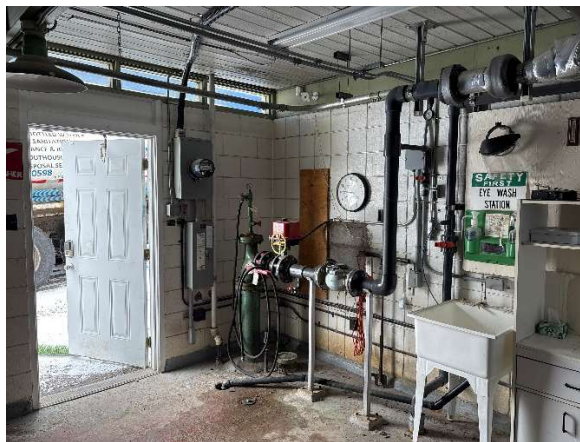


Figure 5: Bulk Water Distribution Building Walls Interior

2.1.2.3 GENERATOR BUILDING

The Generator Building walls are light gauge steel framed. The walls consist of an exterior and interior steel liner which conceal the remainder of the wall building envelope.

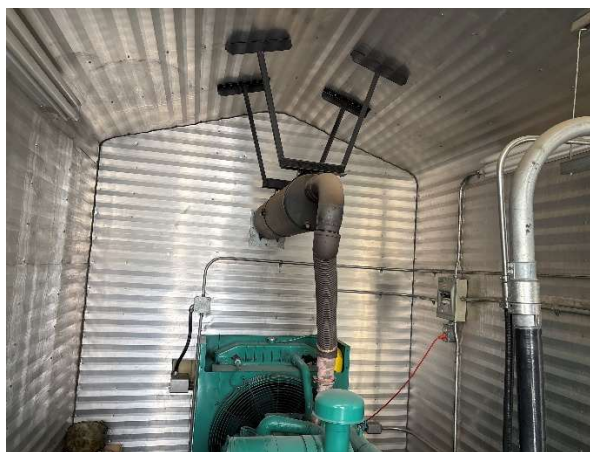


Figure 6: Generator Building Walls Interior

2.1.2.4 WATER STORAGE RESERVOIR

The Water Storage Reservoir walls are suspected to be reinforced cast-in-place concrete. A pre-finished corrugated steel cladding covers the exterior walls of the storage reservoir. Interior access was not permitted during the inspection, limiting the condition assessment to a visual exterior assessment.



Figure 7: Water Storage Reservoir Walls Exterior

2.1.3 Floors

2.1.3.1 MAIN WTP BUILDING

The Main WTP Building floor is a reinforced concrete slab-on-grade which is exposed throughout the building aside from in the office room where a linoleum faux wood flooring is installed.



Figure 8: Main WTP Building Slab-on-Grade

2.1.3.2 BULK WATER DISTRIBUTION BUILDING

In the Bulk Water Distribution Building, the floor is a reinforced concrete slab-on-grade complete with a red epoxy paint finish product.



Figure 9: Bulk Water Distribution Building Slab-on-Grade

2.1.3.3 GENERATOR BUILDING

The Generator Building floor is a checkered steel plate flooring. Beneath the plate flooring is a steel framed skid which is suspected to sit on top of a pile foundation.



Figure 10: Generator Building Checkered Steel Plate Floor

2.1.3.4 WATER STORAGE RESERVOIR

The floor slab of the Water Storage Reservoir was concealed, and the condition was not assessed as interior access was not permitted at the time of inspection.

2.1.4 Foundations

2.1.4.1 MAIN WTP BUILDING

The Main WTP Building foundation is concealed below grade or by perimeter skirting. At the southeast corner of the building, a small section of foundation is exposed which appears to reveal either underpinning at the slab/foundation corner or a pile foundation throughout. With that being the case, it is unclear whether the slab is a structural slab or a slab-on-grade. Comments are made throughout the report considering the slab is structural to provide a more conservative approach to the assessment.



Figure 11: Main WTP Building Southeast Foundation Corner

2.1.4.2 BULK WATER DISTRIBUTION BUILDING

The Bulk Water Distribution Building foundation is concealed below grade. Based on the floor being a slab-on-grade, the superstructure construction, and the age of the building, the foundation is most likely a reinforced concrete shallow foundation featuring strip footings around the perimeter. Part of the reinforced concrete foundation wall is also visible around the building exterior.



Figure 12: Bulk Water Distribution Building Foundation Wall

2.1.4.3 GENERATOR BUILDING

The Generator Building foundation is totally concealed. It is probable that the the prefabricated building is on a pile foundation as the building sits on a skid which is visible from the exterior. Pile foundations are also common for this type of building construction.



Figure 13: Generator Building Skid

2.1.4.4 WATER STORAGE RESERVOIR

The Water Storage Reservoir foundation is unknown. Based on similar construction, it is probable that the reservoir sits on raft-on-grade or raft pile foundation. No foundation was visible above grade from the exterior of the reservoir.

2.2 SITE OVERVIEW

2.2.1 Condition

2.2.1.1 MAIN WTP BUILDING

Around the Main WTP Building, the site is landscaped with grass to the south and west of the building. To the north and east of the building, the site is rough gravel. The gravel and grass are suspected to provide runoff drainage to an extent; however, if the soil below the gravel becomes saturated, there will likely be water ponding at the north and west sides of the building as grading appears to be sloped greater than 2% towards the building foundation. This ponding may contribute to potential wall cladding and foundation deterioration.

2.2.1.2 BULK WATER DISTRIBUTION BUILDING

The site around the Bulk Water Distribution Building is grass on the north and south sides, rough gravel on the east side, and a concrete pad on the west side. Soil infiltration will help prevent ponding around the building; however, grading towards the building foundation on the north side of the building may result in ponding once the soil is saturated.

2.2.1.3 GENERATOR BUILDING

The Generator Building site is grass around the four sides of the building. The north edge of the building is about 200mm (8") from the south wall of the Main WTP Building. Grading is sloped away from the

building around the three exposed sides of the building and the surface is grass. With this being the case, surface water ponding will not likely be an issue around this structure.

2.2.1.4 WATER STORAGE RESERVOIR

The Water Storage Reservoir site is rough gravel or grass around the structure. The grading is sloped away from the Water Storage Reservoir around the perimeter, suggesting limited water surface ponding and proper drainage away from the foundation.

2.2.2 Drainage

2.2.2.1 MAIN WTP BUILDING

The Main WTP Building roof slopes towards the east and west sides of the building. An eavestrough runs along the roof on the east and west building which directs water to downspouts at the south corners of the building. The downspout at the southwest corner of the building is not fitted with a downspout extension to direct water away from the building foundation. The downspout itself at this corner of the building is also heavily damaged with denting closing the end of the downspout.



Figure 14: Main WTP Building Missing Downspout Extension

2.2.2.2 BULK WATER DISTRIBUTION BUILDING

The Bulk Water Distribution Building has a relatively flat roof with an angled parapet board around the perimeter to direct roof runoff to an opening and downspout on the north side of the roof. The roof drainage system overall does not appear to be effective in directing runoff from the roof away from the entrance and building foundation.



Figure 15: Bulk Water Distribution Building Roof Drainage System

2.2.2.3 GENERATOR BUILDING

The Generator Building roof slopes to the north and south with a partial eavestrough running along the roof on each side. No downspouts or downspout extensions were identified to continuously carry roof runoff away from the building foundation. There does appear to be a parapet fascia on the east and west ends of the building to prevent roof runoff from obstructing the building entrance.



Figure 16: Generator Building Roof Drainage System

2.2.2.4 WATER STORAGE RESERVOIR

The Water Storage Reservoir roof was not assessed due to lack of accessibility at the time of inspection. For that reason, the roof drainage can not be commented on.

2.3 ENVELOPE

2.3.1 Main WTP Building Exterior

The pre-finished corrugated steel roof cladding on the Main WTP Building was difficult to observe due to accessibility limitations. It is reasonable to consider the roofing to be in fair condition based on the condition of other building cladding elements. The pre-finished steel fascias on the north and south faces of the building are in good condition. The pre-finished corrugated steel wall cladding is generally in poor condition with large sections of staining, penetrations, and paint fading. The wall cladding on the east face of the building is in fair condition and looks to have been replaced in the last 5-10 years. At the bottom of the north, south, and west walls, some instances of cladding corrosion were identified.



Figure 17: Main WTP Building Cladding Penetrations



Figure 18: Main WTP Building Cladding Corrosion

2.3.2 Bulk Water Distribution Building Exterior

The Bulk Water Distribution Building gravel roof was not assessed in detail due to limit access. It is probable that the gravel roof is in poor condition as some plant growth could be observed from ground level. The painted wood fascias and soffits are in poor condition as paint is flaking substantially. The CMU block walls are stained or scuffed in many instances around the building exterior.



Figure 19: Bulk Water Distribution Building Wood Soffit Paint Flaking



Figure 20: Bulk Water Distribution Building CMU Block Wall Scuffs

2.3.3 Generator Building Exterior

The Generator Building steel roofing was not assessed as access was not permitted at the time of inspection. It is probable that the steel roofing is in fair condition as the wall steel cladding is in fair condition with only some minor staining.



Figure 21: Generator Building Wall Cladding Stains

2.3.4 Water Storage Reservoir Exterior

The Water Storage Reservoir roof was not assessed due to lack of accessibility at the time of inspection. The wall cladding is in good to fair condition with minimal staining and no signs of denting, penetrations, or corrosion. The roof should be assessed further to confirm the condition is fair or better; however, with the condition of the wall cladding being good to fair, the roofing condition is not likely a concern.



Figure 22: Water Storage Reservoir Wall Cladding

2.3.5 Main WTP Building Openings

There are no windows on the Main WTP Building. The garage door on the north side of the building is in poor condition with substantial warping and bends on the bottom panel which appears to have been caused by equipment impact. The weather stripping around the garage door is also in poor condition with warping resulting in voids. The man door on the north side of the building is in fair to poor condition with some paint flaking and staining. Substantial staining is apparent on the interior face of the door and weatherstripping is worn out as daylight can be seen from within. The east man door frame is in fair to poor condition with visible paint flaking. Weather stripping and the door itself appear to be in good condition.



**Figure 23: Main WTP Building North Garage Door
Damage**



**Figure 24: Main WTP Building North Man Door
Deterioration**



Figure 25: Main WTP Building East Door Frame Paint Flaking

2.3.6 Bulk Water Distribution Building Openings

The windows on the Bulk Water Distribution Building appear to be at the end of their service life. The deteriorated frames, caulking, and single pane glass result in reduced thermal performance. The man door on the west side of the building is in fair condition along with the door frame and weather stripping.



Figure 26: Bulk Water Distribution Building Window Deterioration

2.3.7 Generator Building Openings

The Generator Building door, door frame, and weather stripping are in good condition and should be performing to their design intent.



Figure 27: Generator Building Door

2.3.8 Main WTP Building Interior

In the Main WTP Building, insulation on the roof and walls is concealed by a vapour barrier which is exposed on the interior face of the building exterior surfaces. The plastic liner is in fair to poor condition with some penetrations and joint separations. Although the fiberglass insulation itself is concealed in most cases, there has likely been some environmental exposure resulting in insulation degradation to a state of fair to poor condition. Interior face pre-finishing corrugated steel wall and roof cladding/decking is in good condition in the WTP room. Drywall and paint finishing on the interior walls are in fair to poor condition with some scuffs and drywall tape exposure. The linoleum flooring in the office area is covered in dirt but appears to be in fair condition. The slab epoxy finish in the WTP portion of the building and in the public works shop washroom is deteriorated. No slab epoxy finish appears to have been applied in the public works garage portion of the building.



Figure 28: Main WTP Building Plastic Liner Penetrations



Figure 29: Main WTP Building Drywall Damage



Figure 30: Main WTP Building Slab Epoxy Finish Deterioration

2.3.9 Bulk Water Distribution Building Interior

In the Bulk Water Distribution Building, the ceiling plank paint is flaking substantially throughout the building. Paint on the CMU block wall interior faces is worn out and stained in many instances. The exposed interior face of the foundation wall is also painted and flaking is apparent. Overall, the interior building paint finishes are in poor condition. The caulking between CMU blocks is worn out and cracking in the expansion joint caulking is common. The slab epoxy finish is deteriorated across the entire surface resulting in reduced traction and debris spread across the floor.



**Figure 31: Bulk Water Distribution Building Ceiling
Paint Flaking**



**Figure 32: Bulk Water Distribution Building Worn Out
Wall Paint**

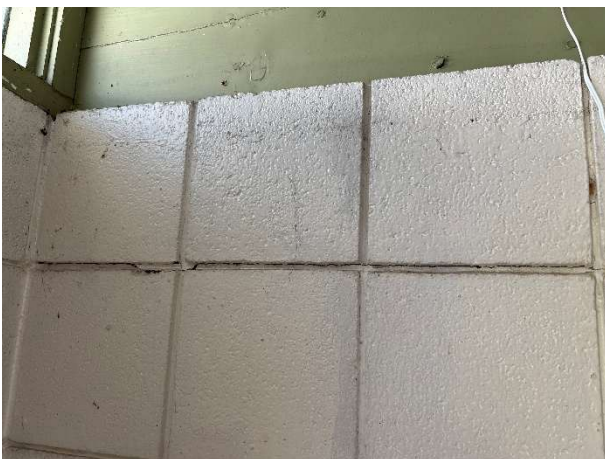


Figure 33: Bulk Water Distribution Building Worn Out Wall Caulking



Figure 34: Bulk Water Distribution Building Slab Epoxy Finish Deterioration

2.3.10 Generator Building Interior

The interior face of the Generator Building is covered with a steel liner which is in good condition. The checkered steel plate floor is in fair condition with some staining.



Figure 35: Generator Building Interior Steel Liner

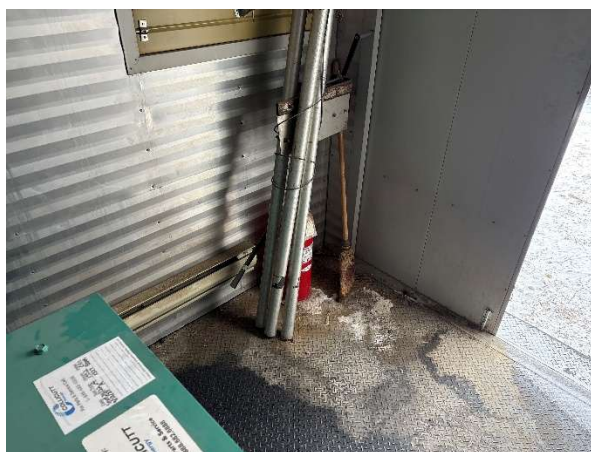


Figure 36: Generator Building Floor Staining

2.4 STRUCTURAL

Some of the structural components of the buildings were concealed and could not be visually assessed. Structural components that were visible and above grade were assessed on a current condition basis. The building components were not assessed for their compliance with the latest version of the National Building Code of Canada – 2023 Alberta Edition (NBCC).

2.4.1 Main WTP Building

In the Main WTP Building, some of the pre-engineered steel building structure can be assessed from the building interior. Roof beams and columns appear to be in fair condition. Some welds across steel roof

framing members appear to be burnt through. These weld defects may result in reduced capacity. Steel connections including baseplates and bolts appear to be in good condition. The slab throughout the Main WTP Building is in fair condition with some cracking and popouts visible across the interior surface. If this slab is indeed a structural slab suspended on beams and piles, the capacity of the slab may be reduced enough to warrant concern. The office roof in the Main WTP Building is currently being utilized as a storage space. Storage loading can be greater than roof loading and it is unclear if the office roof structure was designed for storage loading. From the Main WTP Building exterior, a potential shear crack in the concrete slab/beam can be seen at the suspected underpinning location at the southeast corner of the building.



Figure 37: Main WTP Building Steel Beam/Column
Weld Burns



Figure 38: Main WTP Building Slab Cracking

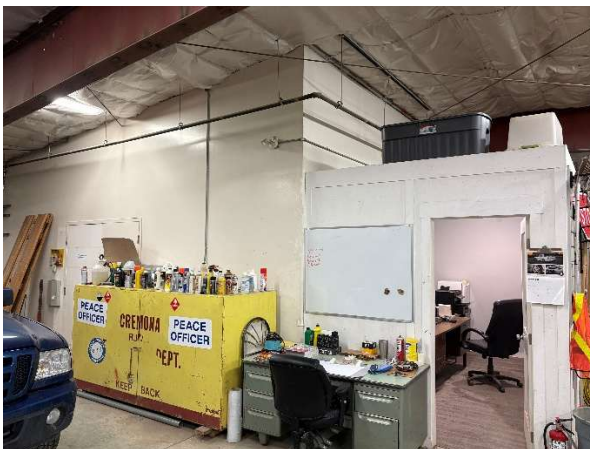


Figure 39: Main WTP Building Office Roof Storage



Figure 40: Main WTP Building Beam/Slab Shear Crack

2.4.2 Bulk Water Distribution Building

In the Bulk Water Distribution Building, some of the CMU wall blocks are damaged from what appears to be abrasions. As a result, chunks of the CMU blocks as large as 13mm (1/2") deep and 38mm (1.5") across

have been broken off from the building. It is unlikely that these abrasions have resulted in the building walls being over structural capacity at this time. The top 200mm (8") of foundation wall is exposed around the building. The foundation wall appears to be in fair condition. There was some minor cracking identified that is not suspected to impede the foundation walls structural integrity.



**Figure 41: Bulk Water Distribution Building CMU Wall
Block Abrasions**



**Figure 42: Bulk Water Distribution Building
Foundation Cracking**

2.4.3 Generator Building and Water Storage Reservoir

No structural concerns were visually identified in the Generator Building or the Water Storage Reservoir at the time of the assessment.

2.5 MECHANICAL

2.5.1 Plumbing

2.5.1.1 DOMESTIC

A small tank-type A.O. Smith electric water heater is installed at floor level in the Public Works Shop. The make and model could not be confirmed due to the absence of drawings and a nameplate. This unit only serves the plumbing fixtures in the Public Works Shop washroom. It is installed on a wooden plywood base, providing separation from the floor. The water heater appears to be in good condition, with no visible corrosion, deformation, or signs of active leakage at the piping or base. As the building was constructed in 2012, it is assumed the unit was also installed that same year. Tank-type water heaters typically have a service life of 10-15 years. Therefore, the unit is estimated to have approximately 1 year of remaining service life.

The water service for the Public Works Shop rises from below grade into the water treatment plant, where it supplies the water heater and plumbing fixtures in both the works shop and the treatment plant. Overall, the water service piping to the Public Works Shop appears to be in good condition.



Figure 43: Public Works Shop Water Heater

2.5.1.2 SANITARY

Based on the construction drawings, the sanitary service for the Public Works Shop and WTP Building is a 150 mm (6") line that exits the building on the west side. The service collects flow from the trench drains and plumbing fixtures in the Public Works Shop, as well as the floor drains in the WTP. As the building was constructed in 2012, the sanitary service is approximately 14 years old.

2.5.1.3 PLUMBING FIXTURES

2.5.1.3.1 *Public Works Shop*

The washroom in the Public Works Shop is equipped with commercial-grade, white vitreous china fixtures, including a floor-mounted, tank-type water closet and a drop-in lavatory with a two-knob faucet with hot and cold taps. A shower space is also provided. The fixtures appear to be in good condition.

In addition, two linear trench drains with metal grates are installed flush with the concrete slab to collect surface water. They appear intact and serviceable, with minor wear consistent with normal use.

2.5.1.3.2 *Bulk Water Distribution Building (Pump Station)*

The Bulk Water Distribution Building (pump station) is equipped with a freestanding utility sink, as shown in **Figure 43**, complete with a single-handle pull-down faucet. The sink is made of polypropylene and is

installed below the eyewash station. Its sanitary outlet is routed through piping to an open floor penetration without a floor drain. Although the sink shows surface wear and discoloration, it remains functional.



Figure 44: WTP Utility Sink



Figure 45: Bulk Water Distribution Building Utility Sink

2.5.1.4 STORM

See Sections 2.2.1 and 2.2.2.

2.5.1.5 GAS

The main 25 mm (1") natural gas service rises from below grade near the entrance door of the Bulk Water Distribution Building. Downstream of the regulator and meter, the piping branches to supply the Bulk Water Distribution Building via a 25 mm (1") line, and the Public Works Shop and WTP Building via a 32 mm (1¼") line and transitions to 2" for the vertical section dropping below grade.

The exterior gas piping is protected by steel bollards with reflectors. The vertical pipe dropping to below grade appears slightly curved, as shown in Figure 5. However, no visible damage or cracking was observed. This condition should be monitored over time for any movement or change. Additionally, corrosion and weathering are present on the gas piping, valves, and bollards, which is consistent with exterior exposure.



Figure 46: Bulk Water Distribution Building Gas Service

2.5.1.5.1 Public Works Shop & Water Treatment Plant Building

The 50 mm (2") natural gas supply for the building rises from below grade and enters through the wall to serve the gas-fired unit heaters and water heater. The gas piping and valves exhibit some corrosion but appear to be in good condition.

2.5.1.5.2 Bulk Water Distribution Building (Pump Station)

The 25 mm (1") natural gas supply piping for the building enters through the wall to serve the gas-fired unit heater.



Figure 47: Gas Service Entering the Pump Station



Figure 48: Gas Serving the Public Works Shop & WTP Building

2.5.2 HVAC

2.5.2.1 HEATING

2.5.2.1.1 Public Works Shop

The Public Works Shop is heated by two (2) gas-fired unit heaters (UH-1, UH-2) suspended from the roof structure. The units are Reznor UDAS150-S, with 150,000 Btu/hr (44 kW) input and 124,000 Btu/hr (36

kW) output at 83% efficiency. The thermostats of the heaters are wall-mounted below each heater and are readily accessible for operation. Minor surface marks and discoloration are visible, consistent with normal age and use. However, the units appear to be working as intended. The heaters were installed in March 2012. Unit heaters typically have a service life of approximately 30 years. Therefore, the units have an estimated remaining service life of approximately 16 years.



Figure 49: Typical Workshop Unit Heater



Figure 50: Typical Unit Heater Thermostat

2.5.2.1.2 Water Treatment Plant (WTP)

The WTP is primarily heated by a gas-fired unit heater (UH-3). The unit heater is a Reznor unit, but the model and capacity of the unit cannot be determined. From the construction drawings, the unit was installed in 2012. The thermostat is wall-mounted below the heater and is readily accessible for operation. The unit appears to be properly vented and in good condition. Unit heaters typically have a service life of approximately 30 years. Therefore, the unit has an estimated remaining service life of approximately 16 years.



Figure 51: WTP Unit Heater (UH-3)

2.5.2.1.3 Generator Building

Heating in the Generator Building is provided by an electric baseboard heater and a portable electric space heater, both with integral controls. The make, model, and age of the units could not be determined, as no nameplates were present. Based on their physical condition, the units appear aged, with heavy dust accumulation observed. However, no visible signs of melted plastic, burn marks, or overheating were noted. Despite this, dust accumulation can contribute to reduced reliability and an increased fire risk if not properly addressed.



Figure 52: Baseboard Heater & Portable Heater

2.5.2.1.4 Bulk Water Distribution Building (Pump Station)

The Bulk Water Distribution Building is primarily heated by a ceiling-mounted, gas-fired unit heater. The unit is a Reznor UDAP30, with an input of 30,000 Btu/hr (9 kW) and an output of 24,600 Btu/hr (7 kW). It was installed in June 2008. The heater appears to be properly vented and securely mounted, with no

visible signs of burning, overheating, or damage. Overall, the unit is in good working condition. Gas-fired unit heaters typically have an expected service life of approximately 30 years. Therefore, this unit has an estimated remaining service life of approximately 12 years, provided it is properly maintained.

The unit is controlled by a discontinued Pioneer line-voltage thermostat. It is likely that this thermostat was retained from a previous heating system and reused with the current unit. It is assumed to be functioning. However, its performance should be monitored for signs of inefficiency, such as inaccurate temperature readings, unresponsiveness, or failure to properly control the unit heater.



Figure 53: Unit Heater



Figure 54: Unit Heater Thermostat

2.5.2.2 VENTILATION

2.5.2.2.1 Water Treatment Plant (WTP)

Ventilation for the WTP is provided by a 457x457 mm (18x18") motorized control damper (DM-102) installed on the east wall of the building. The damper is a Tamco unit equipped with a Belimo actuator. The model could not be confirmed, as the nameplate is not visible from ground level. The assembly, including the actuator and electrical connections, appears intact and properly installed, with no visible signs of damage or deterioration. Based on the construction drawings, the unit was part of the 2012 construction. Dampers and actuators typically have a service life of approximately 30 years; therefore, the unit is estimated to have approximately 16 years of remaining service life.



Figure 55: WTP Motorized Damper (DM-102)

2.5.2.2.2 Generator Building

Ventilation in the Generator Building is provided by a manually operated louver. Access to the louver is partially obstructed by stored materials. Overall, the louver and frame are in good condition.

The generator ventilation assembly consists of a wall discharge installed adjacent to the generator set. The venting appears intact and properly aligned, with no visible signs of overheating, leakage, or structural damage. Overall, the system is in good condition.



Figure 56: Manual Louver



Figure 57: Generator Ventilation

2.5.2.3 EXHAUST FANS

2.5.2.3.1 Water Treatment Plant (WTP)

Exhaust for the WTP is provided by a wall-mounted exhaust fan equipped with a 356x356mm (14x14") motorized damper (DM-101). The make and model of the fan and damper could not be confirmed, as the

units' nameplates are not visible. No obvious signs of severe corrosion were observed on the fan housing, and the hangers and supports appear secure. Overall, the units appear to be in good condition. Based on the construction drawings, the fan and the motorized damper were included in the original 2012 construction. Exhaust fans and dampers typically have a service life of approximately 30 years. Therefore, the fan and damper have an estimated remaining service life of approximately 16 years.



Figure 58: WTP Exhaust Fan

2.5.2.3.2 Bulk Water Distribution Building (Pump Station)

Exhaust for the Bulk Water Distribution Building (pump station) is provided by a wall-mounted exhaust fan. The fan is a Canarm S18-F2 (SD180421), rated at 3,200 cfm (1,510 L/s) with a 457.2 mm (18") blade diameter, manufactured in May 2003. The fan housing and grille appear intact, with no visible cracks, distortion, or missing fasteners. The blades and guard are clean and undamaged, with no signs of impact or deformation. Overall, the fan is in good condition. Given a typical service life of approximately 30 years for exhaust fans, the unit has an estimated remaining service life of approximately 7 years.



Figure 59: Wall Exhaust Fan

2.5.3 Fire Suppression

The Public Works Shop & WTP Building, Generator Building, and Bulk Water Distribution Building (pump station) are not equipped with fire sprinkler systems. Fire protection is primarily provided by handheld fire extinguishers located throughout the buildings, specifically at the entrances/exits. Based on the service tags, the fire extinguishers were recently inspected in March 2026 and are in acceptable condition, except for the fire extinguisher in the Generator Building. According to its service tag, the last recorded inspection date for this unit is 2010, as shown in [Figure 60](#). This extinguisher is therefore considered non-compliant and unreliable for emergency use.

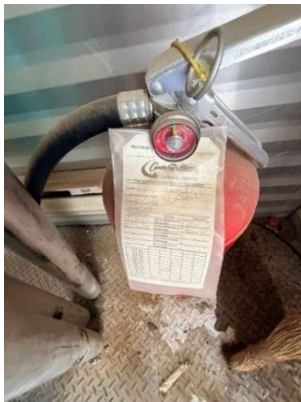


Figure 60: Generator Building Fire Extinguisher



Figure 61: Typical Fire Extinguisher

2.6 ELECTRICAL

2.6.1 Lighting

2.6.1.1 PUBLIC WORKS SHOP AND WATER TREATMENT PLANT

The building's lighting system consists primarily of surface-mounted fixtures and is controlled by a wall-

mounted switch located at the entrance. Based on visual observation, the lights appear to be operational. However, some lights show variation in light output due to dust buildup on the lens cover. The surface-mounted fixtures appear to be T8 fluorescent lights. It is important to note that starting January 1, 2026 the import and manufacture of Linear Fluorescent Lights are prohibited in Canada under the Products Containing Mercury Regulations.

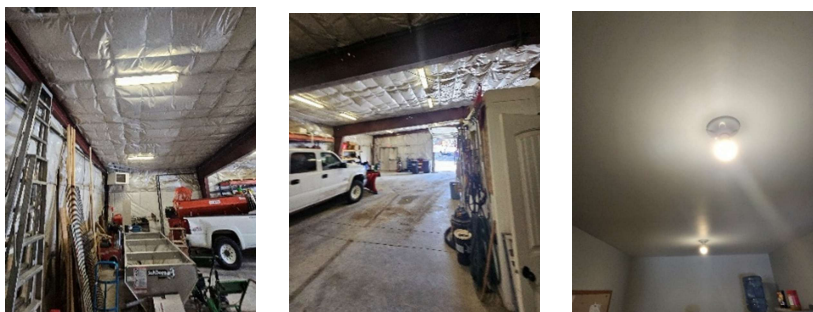


Figure 62: Public Workshop Lighting



Figure 63: Water Treatment Lighting

2.6.1.2 BULK WATER DISTRIBUTION BUILDING (PUMP STATION)

The fire pump building lighting system is a mix of A19 LED bulbs and T8 fluorescent lights. Lighting within the space is controlled manually via a wall-mounted switch located adjacent to the entrance. Based on observation, all luminaires appear to be operational at the time of review. However, there are variations in the light outputs with some of the fixtures showing reduced lumen levels and inconsistent illumination.



Figure 64: Fire Pump Building Existing Lighting

2.6.1.3 GENERATOR BUILDING

The Generator Building lighting system consists of T8 Fluorescent lighting and is manually controlled by a switch at the front entrance. Based on visual observations, the light appears to be operational. However, there are signs of aging including lamp discoloration and lumen output depreciation. In addition, there is a dust buildup in the fixture, indicating that the lights are not being properly maintained.



Figure 65: Generator Walk-in Enclosure Lighting

2.6.2 Distribution

The three buildings are fed from a 240/480V Fortis Utility Transformer. A separate generator walk-in enclosure is located adjacent to the building which houses a 125kVA, 0.8PF generator. Adjacent to the generator walk-in enclosure is the Fire Pump Building, which houses the utility meter, transfer switch, fire pump controller and Main Distribution Panel (MDP). The Main Distribution Panel fed power to the MCC located in the Water Treatment Plant. The MDP serves as the primary distribution point and supplies power to downstream equipment, including the motor control centre (MCC) located within the Water Treatment Plant.

2.6.2.1 PUBLIC WORKS SHOP AND WATER TREATMENT PLANT

This building houses the Motor Control Center which houses a panel, 15kVA transformer, pumps motor starters. The MCC appears to be installed in 2012. Based on observation, the equipment appears to be in a good working condition with no visible damaged.



Figure 66: Motor Control Center

2.6.2.2 BULK WATER DISTRIBUTION BUILDING (PUMP STATION)

The fire pump building houses the utility meter, main disconnect, motor starters, fire pump controller, and MDP. The electrical installation consists of a combination of legacy and newer equipment.

The existing fire pump controller is manufactured by Westinghouse, while the transformer disconnect is manufactured by Federal pacific. Both manufacturers are no longer in operation. While both equipment appear to be in good condition with no visible signs of damage, their age suggests that their internal components such as contactors and relays may be approaching the end of their service life.

The MDP appears to have been installed in 2007 and is in good overall condition with no visible deficiencies noted. Similarly, the motor starters appear to be operational and well-maintained, with no observable issues.



Figure 67: Fire Pump Controller



Figure 68: Utility Meter and Main Disconnect

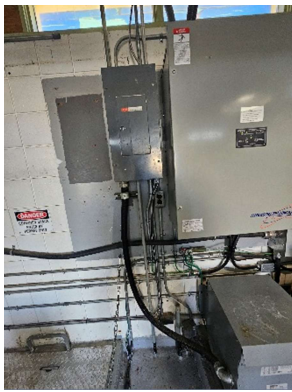


Figure 69: Step-Down Transformer and Disconnect



Figure 70: Main Distribution Panel and Control Panel

2.6.2.3 GENERATOR BUILDING

The generator is an ONAN generator and appears to be installed in the early 2000s and is rated 125kVA. Based on visual observations, the generator set, including alternator, engine components, and control panel, appears to have no visible signs of major physical damage. The equipment shows typical signs of age and operational wear which includes dirt accumulation and minor corrosion. It appears that the generator was last tested in 2023.



Figure 71: Existing Generator

3 RECOMMENDATIONS

The recommendations outlined in the following sections of this report are to be read in conjunction with the applicable observations described in **Section 2** and the “Facility Evaluation Form” in **Appendix A**. The building has several contributing factors that, if left in its current state, could lead to a diminished service life. The following are recommendations for remediation to protect against further degradation and prolong the service life of the building. A cost summary and classification regarding timeline for repair has been provided in the “Facility Evaluation Form” in **Appendix A** of this report.

3.1 SITE

3.1.1 Main WTP Building

Around the Main WTP Building, a drainage evaluation is recommended to determine if the site grading is performing as expected. This can be achieved by observing surface flow during a rainfall event and locating areas where pooling is still present following the event. Alternatively, an evaluation may be artificially generated by applying a large amount of water to the surface (typically using a fire hose), observing surface flow, and locating areas where pooling is present. However, cost should be considered before this alternative method is used. Once the drainage analysis has been completed, it is recommended to regrade in the remaining ponding areas.

On the Main WTP Building, the damaged downspout at the southwest corner of the building should be replaced and fitted with a downspout extension to guide water away from the building foundation. The downspout and downspout extension should match the existing at the southeast corner of the building.

3.1.2 Bulk Water Distribution Building

Around the Bulk Water Distribution Building, a drainage evaluation is recommended to determine if the site grading is performing as expected. This can be achieved by observing surface flow during a rainfall event and locating areas where pooling is still present following the event. Alternatively, an evaluation may be artificially generated by applying a large amount of water to the surface (typically using a fire hose), observing surface flow, and locating areas where pooling is present. However, cost should be considered before this alternative method is used. Once the drainage analysis has been completed, it is recommended to regrade in the remaining ponding areas.

On the Bulk Water Distribution Building, the roof drainage system shall be evaluated further by an architect to ensure roof drainage requirements are met. Ponding on the gravel roof will eventually result in building envelope and potentially structural damage to the roof system.

3.1.3 Generator Building

Around the Generator Building, a drainage evaluation is recommended to determine if the site grading is performing as expected. This can be achieved by observing surface flow during a rainfall event and locating areas where pooling is still present following the event. Alternatively, an evaluation may be artificially generated by applying a large amount of water to the surface (typically using a fire hose), observing surface flow, and locating areas where pooling is present. However, cost should be considered before this alternative method is used. Once the drainage analysis has been completed, it is recommended to regrade in the remaining ponding areas.

On the Generator Building, eavestroughs should be installed to span the full building depth on either side of the roof. The eavestroughs should be fitted with downspouts and downspout extensions as to guide water away from the building and the adjacent buildings foundations.

3.2 ENVELOPE

3.2.1 Main WTP Building

The Main WTP Building's pre-finished corrugated steel roof decking should be assessed more closely from the roof surface. It is probable that the roofing is in similar condition to the wall cladding. If that is the case, the roofing is due for replacement and should be replaced with a pre-finished corrugated steel roofing product selected by an accredited architect in the Province of Alberta.

The Main WTP Building's pre-finished corrugated steel wall cladding should be replaced on the north, south, and west sides of the building with a pre-finished corrugated steel wall cladding to match the existing east wall cladding.

The garage door and north man door on the Main WTP Building should be replaced along with the door frames and weather stripping.

The east man door frame of the Main WTP Building should be stripped and painted with an exterior grade metal painting product.

In the Main WTP Building, plastic liner penetrations should be patched, and joint separations should be reconnected. The materials and methods should be approved with the insulation product manufacturer to ensure proper performance.

Drywall scuffs and damage should be patched and refinished to match the existing throughout the Main WTP Building.

Slab epoxy finish in the WTP room of the Main WTP Building should be reapplied to ensure slab protection from contaminants and proper traction for operators. The slab epoxy finish should be graded for interior use with WTP operating exposure.

3.2.2 Bulk Water Distribution Building

On the Bulk Water Distribution Building, the soffit and fascia paint should be stripped and refinished with an exterior grade wood paint.

On the Bulk Water Distribution Building, the CMU block wall paint and foundation wall paint should be primed and painted using an exterior grade masonry/concrete primer and paint on the exposed interior and exterior surfaces.

The windows, window frames, and caulking on the Bulk Water Distribution Building should be replaced to prevent moisture intrusion and improve the buildings thermal performance.

The paint on the interior face of the wood ceiling planks in the Bulk Water Distribution Building should be stripped and refinished with an exterior grade wood painting product.

CMU block wall joint caulking in the Bulk Water Distribution Building should be reapplied throughout the interior face of the building with an exterior grade caulking product.

Slab epoxy finish in the Bulk Water Distribution Building should be stripped and reapplied with a topping graded for exterior use with WTP operating exposure. This will ensure slab protection from contaminants and proper traction for operators.

3.2.3 Generator Building

The Generator Building wall cladding stains should be cleaned following the requirements outlined by the building fabricator. Moisture staining can be an early warning sign of corrosion and if proper cleaning occurs, the chances of supplemental issues is reduced along with the aesthetic benefits.

The Generator Building checkered steel plate floor stains should be cleaned following the requirements outlined by the building fabricator. Moisture staining can be an early warning sign of corrosion and if proper cleaning occurs, the chances of supplemental issues is reduced along with the aesthetic benefits.

3.3 STRUCTURAL

3.3.1 Main WTP Building

In the Main WTP Building, the burnt through steel members should be cleaned and refinished to match existing. It is not suspected that these burn through welds are substantial enough to pose a structural concern.

In the Main WTP Building, the slab system should be assessed in depth from a structural perspective by an engineer accredited in the province of Alberta to determine the load resisting design intention of the slab. This will allow a determination to be made on whether the slab surface cracking and potential exterior shear crack pose a structural integrity concern to the building.

Following a structural review, the interior and exterior cracking on the Main WTP Building slab should be patched and repaired using an exterior grade concrete patching/repair compound.

The roof of the office in the Main WTP Building should be structurally assessed for storage loading or signs should be utilized to prevent storage on top of the roof structure and existing storage items should be removed.

3.3.2 Bulk Water Distribution Building

On the Bulk Water Distribution Building, damaged CMU blocks should be patched and repaired using an exterior grade masonry patching/repair product and finished to match the existing. This will prevent moisture intrusion and further deterioration.

On the Bulk Water Distribution Building, foundation wall cracks should be patched and repaired using an exterior grade concrete patching/repair product and finished to match the existing. This will prevent moisture intrusion and further deterioration.

3.4 MECHANICAL

3.4.1 Plumbing

3.4.1.1 DOMESTIC

3.4.1.1.1 Public Works Shop

The tank-type A.O. Smith electric water heater inside the Public Works Shop remains in good condition. However, it is approaching the end of its typical 10-15 year service life, having been installed in 2012. The water heater should be replaced within the next 2 years, or sooner if any signs of deterioration or performance issues arise.

3.4.1.2 PLUMBING FIXTURES

3.4.1.2.1 Water Treatment Plant (WTP)

The WTP is equipped with a freestanding polypropylene utility sink complete with seven small-diameter faucets. The sink and faucets exhibit heavy orange-brown staining, likely due to iron in the process water having penetrated the material surface. Chalking is also present, suggesting material degradation and potential brittleness, indicating a reduced remaining service life. It is recommended that the sink and faucets be replaced immediately with a more suitable material for industrial/process applications, such as a 316 stainless steel utility sink and faucets.

3.4.1.3 GAS

The main natural gas service rises from below grade near the entrance door of the Bulk Water Distribution Building appears to be in good condition and is protected by steel bollards with reflectors. The vertical pipe dropping to below grade appears slightly curved. However, no visible damage or cracking was observed. This condition should be monitored over time for any movement or change. In addition, address surface corrosion and weathering on exterior gas piping, valves, and protective bollards through cleaning and application of appropriate protective coatings to extend service life and maintain corrosion resistance.

At the Public Works Shop & WTP Building, the 50 mm (2") natural gas supply for the building rises from below grade and enters through the wall to serve the gas-fired unit heaters and water heater. While currently in good condition, localized corrosion should be addressed through cleaning and recoating where required.

3.4.2 HVAC

3.4.2.1 HEATING

3.4.2.1.1 Public Works Shop

Heating in the Public Works Shop is provided by two (2) gas-fired unit heaters (UH-1, UH-2). The units are Reznor UDAS150-S, at 150,000 Btu/hr (44 kW) input and 124,000 Btu/hr (36 kW) output. The units exhibit minor surface wear and discoloration consistent with normal age and use. Based on a typical service life of 30 years, the units have an estimated remaining service life of approximately 16 years. Replacement is recommended within this timeframe.

3.4.2.1.2 Water Treatment Plant (WTP)

Heating in the WTP is provided by a gas-fired unit heater (UH-3). The equipment is a Reznor unit. However, the make and model could not be confirmed. The unit appears to be in good condition and was installed in 2012. The unit has an estimated remaining service life of approximately 16 years, based on a typical service life of 30 years. Replacement is recommended within this timeframe.

3.4.2.1.3 Generator Building

Heating in the Generator Building is provided by an electric baseboard heater and a portable electric space heater, both with integral controls. Based on their physical condition, the units appear aged, with heavy dust accumulation observed. It is recommended that all heating equipment be incorporated into a routine maintenance program, including periodic cleaning and inspection to reduce fire risk.

3.4.2.1.4 Bulk Water Distribution Building (Pump Station)

The Bulk Water Distribution Building is primarily heated by a Reznor ceiling-mounted, gas-fired unit heater that was installed in June 2008. The heater appears to be in good working condition. However, it is controlled by a discontinued Pioneer line-voltage thermostat. While the thermostat is currently assumed to be functioning, its performance should be monitored for signs of inefficiency, including inaccurate temperature control, unresponsiveness, or improper cycling of the unit heater, and replaced with a newer thermostat if necessary.

3.4.2.2 VENTILATION

3.4.2.2.1 Water Treatment Plant (WTP)

The 457x457 mm (18x18") motorized control damper (DM-102) and the Belimo actuator installed on the east wall of the WTP was part of the 2012 construction. With a typical service life of approximately 30 years, the units are estimated to have approximately 16 years of remaining service life.

3.4.2.3 EXHAUST FANS

3.4.2.3.1 *Water Treatment Plant (WTP)*

Exhaust for the WTP is provided by a wall-mounted exhaust fan equipped with a 356x356mm (14x14") motorized damper (DM-101) installed in 2012. The make and model could not be identified, as the units' nameplate are not visible. Overall, the units appear to be in good condition. Based on a typical service life of 30 years, the units have an estimated remaining service life of approximately 16 years. Replacement is recommended within this timeframe.

3.4.2.3.2 *Bulk Water Distribution Building (Pump Station)*

Exhaust for the Bulk Water Distribution Building (pump station) is provided by a Canarm wall-mounted exhaust fan. The fan housing and grille appear intact, with no visible cracks, distortion, or missing fasteners. The blades and guard are clean and undamaged, with no signs of impact or deformation. Based on a typical service life of approximately 30 years for exhaust fans, the unit has an estimated remaining service life of about 7 years. It is recommended to plan for replacement within the next 8 years to ensure continued reliable operation.

3.4.3 *Fire Suppression*

The Public Works Shop & WTP Building, Generator Building, and Bulk Water Distribution Building (pump station) fire protection is primarily provided by handheld fire extinguishers located throughout the buildings, specifically at the entrances/exits. While most extinguishers were inspected in March 2026 and are in acceptable condition, the extinguisher in the Generator Building is non-compliant, with the last recorded service date of 2010. The non-compliant extinguisher in the Generator Building should be immediately replaced or serviced to ensure it meets current inspection and safety requirements.

3.5 ELECTRICAL

3.5.1 Lighting

3.5.1.1 PUBLIC WORKSHOP AND WATER TREATMENT PLANT

It is recommended to perform housekeeping, such as cleaning the cover lens to remove all dirt buildup. Since fluorescent lighting has been banned in Canada, it is recommended to retrofit all lights with Type B LED T8 lamps (ballast bypass). This would provide improved illumination uniformity, increased energy efficiency, and reduced maintenance costs. An alternate recommendation is a full fixture replacement and introducing automatic control, such as an occupancy sensor, to automatically turn off the light when no motion is detected.

3.5.1.2 BULK WATER DISTRIBUTION BUILDING (PUMP STATION)

Due to dirt buildup in light fixtures, it is recommended to clean them out to improve light illumination. In addition, it is recommended to retrofit all fluorescent lighting with Type B LED lights, as fluorescent lighting has been banned in Canada.

3.5.1.3 GENERATOR BUILDING

Although the lights appear operational, it is recommended to retrofit all fluorescent lights with Type B LED lights, as fluorescent lights have been banned in Canada. In addition, it is recommended to clean out each fixture to clear any dirt buildup and debris.

3.5.2 Distribution

3.5.2.1 PUBLIC WORKSHOP AND WATER TREATMENT PLANT

The MCC appears to be in good working condition. There are no immediate concerns or recommendations for the replacement of the electrical equipment.

3.5.2.2 BULK WATER DISTRIBUTION BUILDING (PUMP STATION)

It is recommended to replace the fire pump controller and disconnects with new supported products. On the other hand, there are no immediate concerns or recommendations for the MDP since the panel appears to be new.

3.5.2.3 GENERATOR BUILDING

The generator appears to be operational, but due to its current condition, it is recommended to perform a comprehensive inspection and maintenance review since it appears that the last time it was tested was in 2023. In addition, it is recommended to verify the control system, battery unit, fuel and proper operation under load. Full replacement should also be considered, since the generator appears to be supplying back-up power to the fire pump.

4 BUDGETARY COST

Reference the “Facility Evaluation Form” in **Appendix A** for a budgetary cost estimate of each recommended item described in **Section 3**.

5 FACILITY CONDITION INDEX

The Facility Condition Index (FCI) outlined below is a value calculated based on the total repair/renewal costs projected over the coming 5 year period in direct relation to the total replacement cost of the facility in current construction markets.

$$\frac{5 \text{ Year Repair/Renewal Costs}}{\text{Replacement Cost}} = \text{FCI Rating } \%$$

Provided FCI ratings as appropriate:

- Good: 0% to 10% FCI
- Fair: 10% to 25% FCI
- Poor: 25% to 60% FCI
- Prohibitive to repair: 60% + FCI

Based on our assessment the current 5-year renewal costs are \$186,000.00. The projected cost to replace a facility of similar size and construction methodology is an estimated \$1,800,000.00; therefore, the Facility Condition Index for the Admin Office, Fire Hall, and Library Building is considered fair at 10.3%.

APPENDIX A:

FACILITY EVALUATION FORMS

Facility Evaluation Form
Part I - Architectural Structural

Section 1	Item	Rating	Risk Factor	Photo	Comments/Concerns	Estim. Cost
1.1	Site Conditions					
1.1.1	Site Drainage Evaluation and Regrading (Main WTP Building, Bulk Water Distribution Building, and Generator Building)	3	Medium		Around the main WTP building, bulk water distribution building, and generator building, a drainage evaluation is recommended to determine if the site grading is performing as expected. This can be achieved by observing surface flow during a rainfall event and locating areas where pooling is still present following the event. Alternatively, an evaluation may be artificially generated by applying a large amount of water to the surface (typically using a fire hose), observing surface flow, and locating areas where pooling is present. However, cost should be considered before this alternative method is used. Once the drainage analysis has been completed, it is recommended to regrade in the remaining ponding areas.	\$ 5,000.00
1.1.2	Damaged Downspout and Missing Extension (Main WTP Building)	2	Medium		On the main WTP building, the damaged downspout at the southwest corner of the building should be replaced and fitted with a downspout extension to guides water away from the building foundation. The downspout and downspout extension should match the existing at the southeast corner of the building.	\$ 1,500.00
1.1.3	Insufficient Roof Drainage (Bulk Water Distribution Building)	3	High		On the bulk water distribution building, the roof drainage system shall be evaluated further by an architect to ensure roof drainage code requirements are met. Ponding on the gravel roof will eventually result in building envelope and potentially structural damage to the roof system.	\$ 3,000.00
1.1.4	Eavestroughs, Downspouts, and Downspout Extensions (Generator Building)	3	Medium		On the generator building, eavestroughs should be installed to span the full building depth on either side of the roof. The eavestroughs should be fitted with downspouts and downspout extensions as to guide water away from the building and the adjacent buildings foundations.	\$ 5,000.00
1.2	Building Envelope					

Facility Evaluation Form
Part I - Architectural Structural

Section 1	Item	Rating	Risk Factor	Photo	Comments/Concerns	Estim. Cost
1.2.1	Corrugated Steel Roof Decking (Main WTP Building)	F.I.	High		The main WTP building's pre-finished corrugated steel roof decking should be assessed more closely from the roof surface. It is probable that the roofing is in similar condition to the wall cladding. If that is the case, the roofing is due for replacement and should be replaced with a pre-finished corrugated steel roofing product selected by an accredited architect in the Province of Alberta.	\$ 40,000.00
1.2.2	Corrugated Steel Wall Cladding (Main WTP Building)	2	High		The main WTP building's pre-finished corrugated steel wall cladding should be replaced on the north, south, and west sides of the building with a pre-finished corrugated steel wall cladding to match the existing east wall cladding.	\$ 60,000.00
1.2.3	Soffit and Fascia Paint (Bulk Water Distribution Building)	1	Medium		On the bulk water distribution building, the soffit and fascia paint should be stripped and refinished with an exterior grade wood paint.	\$ 5,000.00
1.2.4	CMU Block Wall and Foundation Wall Paint and Primer (Bulk Water Distribution Building)	2	Medium		On the bulk water distribution building, the CMU block wall paint and foundation wall paint should be primed and painted using an exterior grade masonry/concrete primer and paint on the exposed interior and exterior surfaces.	\$ 10,000.00
1.2.5	Wall Cladding Staining (Generator Building)	4	Medium		The generator building wall cladding stains should be cleaned following the requirements outlined by the building fabricator. Moisture staining can be an early warning sign of corrosion and if proper cleaning occurs, the chances of supplemental issues is reduced along with the aesthetic benefits.	\$ 200.00
1.2.6	Garage Door and Man Door Doors, Frames, and Weather Stripping (Main WTP Building)	2	Medium		The garage door and north man door on the main WTP building should be replaced along with the door frames and weather stripping. The east man door frame of the main WTP building should be stripped and painted with an exterior grade metal painting product.	\$ 30,000.00
1.2.7	Windows, Frames, and Caulking (Bulk Water Distribution Building)	3	Medium		The windows, window frames, and caulking on the bulk water distribution building should be replaced to prevent moisture intrusion and improve the buildings thermal performance.	\$ 15,000.00

Facility Evaluation Form
Part I - Architectural Structural

Section 1	Item	Rating	Risk Factor	Photo	Comments/Concerns	Estim. Cost
1.2.8	Insulation Liner (Main WTP Building)	3	High		In the main WTP building, plastic liner penetrations should be patched, and joint separations should be reconnected. The materials and methods should be approved with the insulation product manufacturer to ensure proper performance.	\$ 5,000.00
1.2.9	Drywall Scuffs and Damage (Main WTP Building)	2	Low		Drywall scuffs and damage should be patched and refinished to match the existing throughout the main WTP building.	\$ 5,000.00
1.2.10	Slab Epoxy Finish (Main WTP Building)	3	Medium		Slab epoxy paint finish in the WTP room of the main WTP building should be reapplied to ensure slab protection from contaminants and proper traction for operators. The slab epoxy finish should be graded for interior use with WTP operating exposure.	\$ 8,000.00
1.2.11	Ceiling Paint (Bulk Water Distribution Building)	2	Medium		The paint on the interior face of the wood ceiling planks in the bulk water distribution building should be stripped and refinished with an exterior grade wood painting product.	\$ 5,000.00
1.2.12	CMU Block Wall Joint Caulking (Bulk Water Distribution Building)	3	Medium		CMU block wall joint caulking in the bulk water distribution building should be reapplied throughout the interior face of the building with an exterior grade caulking product.	\$ 2,000.00
1.2.13	Slab Epoxy Finish (Bulk Water Distribution Building)	1	Medium		Slab epoxy paint finish in the bulk water distribution building should be stripped and reapplied with a epoxy finish graded for exterior use with WTP operating exposure. This will ensure slab protection from contaminants and proper traction for operators.	\$ 8,000.00
1.2.14	Steel Plate Floor Staining (Generator Building)	3	Medium		The generator building checkered steel plate floor stains should be cleaned following the requirements outlined by the building fabricator. Moisture staining can be an early warning sign of corrosion and if proper cleaning occurs, the chances of supplemental issues is reduced along with the aesthetic benefits.	\$ 500.00

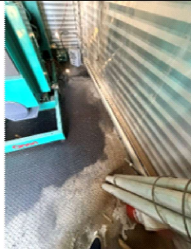
Facility Evaluation Form
Part I - Architectural Structural

Section 1	Item	Rating	Risk Factor	Photo	Comments/Concerns	Estim. Cost
1.3	Structural					
1.3.1	Weld Burn Finishing (Main WTP Building)	3	Medium		In the main WTP building, the burnt through steel members should be cleaned and refinished to match existing. It is not suspected that these burn though welds are substantial enough to pose a structural concern.	\$ 5,000.00
1.3.2	Slab Structural Assessment (Main WTP Building)	3	Urgent		In the main WTP building, the slab system should be assessed in depth from a structural perspective by an engineer accredited in the province of Alberta to determine the load resisting design intention of the slab. This will allow a determination to be made on whether the slab surface cracking and potential exterior shear crack pose a structural integrity concern to the building.	\$ 10,000.00
1.3.3	Slab Patching and Repair (Main WTP Building)	3	High		Following a structural review, the interior and exterior cracking on the main WTP building slab should be patched and repaired using an exterior grade concrete patching/repair compound.	\$ 8,000.00
1.3.4	Office Roof Storage Loading (Main WTP Building)	4	Medium		The roof of the office in the main WTP building should be structurally assessed for storage loading or signs should be utilized to prevent storage on top of the roof structure and existing storage items should be removed.	\$ 2,000.00
1.3.5	CMU Block Wall Damage (Bulk Water Distribution Building)	3	Medium		On the bulk water distribution building, damaged CMU blocks should be patched and repaired using an exterior grade masonry patching/repair product and finished to match the existing. This will prevent moisture intrusion and further deterioration.	\$ 3,000.00
1.3.6	Foundation Wall Cracking (Bulk Water Distribution Building)	3	Medium		On the bulk water distribution building, foundation wall cracks should be patched and repaired using an exterior grade concrete patching/repair product and finished to match the existing. This will prevent moisture intrusion and further deterioration.	\$ 3,000.00
	Overall Building Site Condition & Estimated Costs					\$ 239,200.00

Facility Evaluation Form
Part II - Mechanical

Section 2	Item	Rating	Risk Factor	Photo	Bldg. Section	Description/Condition	Estim. Cost
2.1	Plumbing						
2.1.1	Electric Water Heater	4	High		Public Works Shop	The tank-type A.O. Smith electric water heater inside the public works shop remains in good condition. However, it is approaching the end of its typical 10-15 year service life, having been installed in 2012. The water heater should be replaced within the next 2 years, or sooner if any signs of deterioration or performance issues arise.	\$ 5,000.00
2.1.2	Utility Sink and Faucets	2	Urgent		Water Treatment Plant	The WTP is equipped with a freestanding polypropylene utility sink complete with seven small-diameter faucets. The sink and faucets exhibit heavy orange-brown staining, likely due to iron in the process water having penetrated the material surface. Chalking is also present, suggesting material degradation and potential brittleness, indicating a reduced remaining service life. It is recommended that the sink and faucets be replaced immediately with a more suitable material for industrial/process applications, such as a 316 stainless steel utility sink and faucets.	\$ 3,500.00
2.1.3	Public Works Shop Stormwater Piping	2	Urgent		Exterior of the Public Works Shop	One of the building's stormwater pipes appears to be deformed at the ground-level outlet. This should be repaired or replaced to ensure that flow is not restricted.	\$ 1,000.00
2.1.4	Gas Service	3	Urgent		Exterior	The main natural gas service at the bulk water distribution building rises from below grade and appears to be in good condition, with steel bollard protection in place. Surface corrosion and weathering on exterior gas piping and valves should be cleaned and repainted to extend service life and maintain corrosion resistance. At the public works shop & WTP Building, the 50 mm (2") natural gas supply for the building rises from below grade and enters through the wall to serve the gas-fired unit heaters and water heater. While currently in good condition, localized corrosion should be addressed through cleaning and repainting where required.	\$ 10,000.00

Facility Evaluation Form
Part II - Mechanical

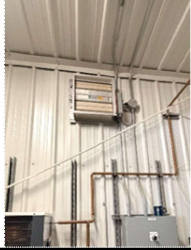
Section 2	Item	Rating	Risk Factor	Photo	Bldg. Section	Description/Condition	Estim. Cost
2.2	HVAC						
2.2.1	Gas-fired Unit Heaters (UH-1, UH-2)	4	Low		Public Works Shop	Heating in the public works shop is provided by two (2) gas-fired unit heaters (UH-1, UH-2). The units are Reznor UDAS150-S, at 150,000 Btu/hr (44 kW) input and 124,000 Btu/hr (36 kW) output. The units exhibit minor surface wear and discoloration consistent with normal age and use. Based on a typical service life of 30 years, the units have an estimated remaining service life of approximately 16 years. Replacement is recommended within this timeframe.	\$ 20,000.00
2.2.2	Gas-fired Unit Heaters (UH-3)	4	Low		Water Treatment Plant	Heating in the WTP is provided by a gas-fired unit heater (UH-3). The equipment is a Reznor unit. However, the make and model could not be confirmed. The unit appears to be in good condition and was installed in 2012. The unit has an estimated remaining service life of approximately 16 years, based on a typical service life of 30 years. Replacement is recommended within this timeframe.	\$ 10,000.00
2.2.3	Electric Baseboard Heater and Portable Electric Space Heater	2	Urgent		Generator Building	Heating in the generator building is provided by an electric baseboard heater and a portable electric space heater, both with integral controls. Based on their physical condition, the units appear aged, with heavy dust accumulation observed. It is recommended that all heating equipment be incorporated into a routine maintenance program, including periodic cleaning and inspection to reduce fire risk.	\$ -
2.2.4	Gas-fired Unit Heater Thermostat	3	Medium		Bulk Water Distribution Building (Pump Station)	The bulk water distribution building is primarily heated by a Reznor ceiling-mounted, gas-fired unit heater that was installed in June 2008. The heater appears to be in good working condition. However, it is controlled by a discontinued Pioneer line-voltage thermostat. While the thermostat is currently assumed to be functioning, its performance should be monitored for signs of inefficiency, including inaccurate temperature control, unresponsiveness, or improper cycling of the unit heater, and replaced with a newer thermostat if necessary.	\$ 2,000.00

Project No.: 2490-019-01
Date: April 2026

Facility Evaluation Form

Building: Cremona Public Works Shop and WTP

Part II - Mechanical

Section 2	Item	Rating	Risk Factor	Photo	Bldg. Section	Description/Condition	Estim. Cost
2.2.5	Motorized Control Damper and Actuator	5	Low		Water Treatment Plant	The 457x457 mm (18x18") motorized control damper (DM-102) and the Belimo actuator installed on the east wall of the WTP was part of the 2012 construction. With a typical service life of approximately 30 years, the units are estimated to have approximately 16 years of remaining service life.	\$ 5,000.00

Condition Ratings: 1 - Emergency/Critical 2 - Poor/Unsatisfactory 3 - Marginal 4 - Good 5 - Excellent F.I. - Further investigation required
Risk Factors: Urgent - Replace Immediately High - Replace in 1-2 years Medium - Replace in 5-10 years Low - Replace in 15 years or more

Facility Evaluation Form
Part II - Mechanical

Section 2	Item	Rating	Risk Factor	Photo	Bldg. Section	Description/Condition	Estim. Cost
2.2.6	Exhaust Fan Complete with Motorized Damper				Water Treatment Plant	Exhaust for the WTP is provided by a wall-mounted exhaust fan equipped with a 356x356mm (14x14") motorized damper (DM-101) installed in 2012. The make and model could not be identified, as the units' nameplate are not visible. Overall, the units appear to be in good condition. Based on a typical service life of 30 years, the units have an estimated remaining service life of approximately 16 years. Replacement is recommended within this timeframe.	\$ 10,000.00
2.2.7	Exhaust Fan	4	Medium		Bulk Water Distribution Building (Pump Station)	Exhaust for the bulk water distribution building (pump station) is provided by a Canarm wall-mounted exhaust fan. The fan housing and grille appear intact, with no visible cracks, distortion, or missing fasteners. The blades and guard are clean and undamaged, with no signs of impact or deformation. Based on a typical service life of approximately 30 years for exhaust fans, the unit has an estimated remaining service life of about 7 years. It is recommended to plan for replacement within the next 8 years to ensure continued reliable operation.	\$ 8,000.00
2.3 Fire Suppression							
2.3.1	Fire Extinguisher (Gen. Building)	1	Urgent		Generator Building	The extinguisher in the generator building is non-compliant, with the last recorded service date of 2010. The non-compliant extinguisher in the generator building should be immediately replaced or serviced to ensure it meets current inspection and safety requirements.	\$ 500.00
2.3.2	Fire Extinguisher (WTP)	2	Urgent		Water Treatment Plant	The fire extinguisher near the WTP entrance below eyewash station is resting between chemical jugs/containers. Fire extinguishers should be readily accessible and not obstructed.	\$ -
Overall Mechanical System Condition & Estimated Costs							\$ 75,000.00

Facility Evaluation Form
Part III - Electrical

Section 3	Item	Rating	Risk Factor	Photo	Bldg. Section	Description/Condition	Estim. Cost
3.1	Lighting and Emergency Lighting						
3.1.1	Bulk Water Distribution, Generator, Public Workshop, and Water Treatment Plant Lighting	4	High			The lighting system in all buildings consist of T8 fluorescent light. It is recommended to retrofit with LED Lighting.	\$ 30,000.00
3.2	Distribution						
3.2.1	Emergency Generator	F.I.	Medium			The generator is an ONAN generator and appears to be installed in the early 2000s and is rated 125kVA. Based on visual observations, the generator set, including alternator, engine components, and control panel, appears to have no visible signs of major physical damage. The equipment shows typical signs of age and operational wear which includes dirt accumulation and minor corrosion. It is recommended to perform a comprehensive inspection and maintenance review since it appears that the last time it was tested was in 2023. In addition, it is recommended to verify the control system, battery unit, fuel and proper operation under load.	-
3.2.2	Fire Pump Controller	3	High			The existing fire pump controller is manufactured by Westinghouse. While it appears to be in good condition with no visible signs of damage, its age suggests that its internal components such as contactors and relays may be approaching the end of their service life. Further investigation is required.	\$ 10,000.00
3.2.3	Motor Control Center	4	Low			This building houses the Motor Control Center which houses a panel, 15kVA transformer, pumps motor starters. The MCC appears to be installed in 2012. Based on observation, the equipment appears to be in a good working condition with no visible damaged.	\$ 35,000.00
Overall Building Structural Condition & Estimated Costs							\$ 75,000.00

Facility Evaluation Form
Summary

Site, Architectural, and Structural			
Evaluation Category	Risk Factor	Replace/Repair Timeline	Estimated Cost
Site Conditions	Urgent	Immediate	\$ -
	High	1-2 Years	\$ 3,000.00
	Medium	5-10 Years	\$ 11,500.00
	Low	>15 Years	\$ -
Building Envelope	Urgent	Immediate	\$ -
	High	1-2 Years	\$ 105,000.00
	Medium	5-10 Years	\$ 83,700.00
	Low	>15 Years	\$ 5,000.00
Structural	Urgent	Immediate	\$ 10,000.00
	High	1-2 Years	\$ 8,000.00
	Medium	5-10 Years	\$ 13,000.00
	Low	>15 Years	\$ -
Sub-Total	Urgent	Immediate	\$ 10,000.00
	High	1-2 Years	\$ 116,000.00
	Medium	5-10 Years	\$ 108,200.00
	Low	>15 Years	\$ 5,000.00
Mechanical			
Evaluation Category	Risk Factor	Replace/Repair Timeline	Estimated Cost
Plumbing	Urgent	Immediate	\$ 14,500.00
	High	1-2 Years	\$ 5,000.00
	Medium	5-10 Years	\$ -
	Low	>15 Years	\$ -
HVAC	Urgent	Immediate	\$ -
	High	1-2 Years	\$ -
	Medium	5-10 Years	\$ 10,000.00
	Low	>15 Years	\$ 35,000.00
Fire Suppression	Urgent	Immediate	\$ 500.00
	High	1-2 Years	\$ -
	Medium	5-10 Years	\$ -
	Low	>15 Years	\$ -
Sub-Total	Urgent	Immediate	\$ 15,000.00
	High	1-2 Years	\$ 5,000.00
	Medium	5-10 Years	\$ 10,000.00
	Low	>15 Years	\$ 35,000.00
Electrical			
Evaluation Category	Risk Factor	Replace/Repair Timeline	Estimated Cost
Lighting and Emergency Lighting	Urgent	Immediate	\$ -
	High	1-2 Years	\$ 30,000.00
	Medium	5-10 Years	\$ -
	Low	>15 Years	\$ -
Distribution	Urgent	Immediate	\$ -
	High	1-2 Years	\$ 10,000.00
	Medium	5-10 Years	\$ -
	Low	>15 Years	\$ 35,000.00
Fire Alarm and Communication	Urgent	Immediate	\$ -
	High	1-2 Years	\$ -
	Medium	5-10 Years	\$ -
	Low	>15 Years	\$ -
Sub-Total	Urgent	Immediate	\$ -
	High	1-2 Years	\$ 40,000.00
	Medium	5-10 Years	\$ -
	Low	>15 Years	\$ 35,000.00
Total			
Evaluation Category	Risk Factor	Replace/Repair Timeline	Estimated Cost
Total	Urgent	Immediate	\$ 25,000.00
	High	1-2 Years	\$ 161,000.00
	Medium	5-10 Years	\$ 118,200.00
	Low	>15 Years	\$ 75,000.00